

LIVE STOCK.				1st Prize.	2nd Prize.	3rd Prize.	Total.
<i>Rabbits.</i>				Rs.	Rs.	Rs.	Rs.
53.	For best Buck	...	...	4	...	...	4
54.	For best Doe	...	...	4	...	...	4
55.	For best Cage of 4 Rabbits	...	...	10	5	...	15
				18	5	...	23
<i>Pigeons.</i>							
56.	For best Cage, 3 pairs, of different sorts	...	...	10	5	...	15
57.	For best pair of Tumblers, Sky	...	...	4	2	...	6
58.	For best pair of Tumblers, Ground	...	...	4	2	...	6
59.	For best Pouters	...	...	4	2	...	6
60.	For best Fantails	...	...	4	2	...	6
61.	For best Carriers	...	...	4	2	...	6
62.	For best Sherazees	...	...	4	2	...	6
63.	Other varieties in pairs, at 3 Rupees each pair	...	...	18	...	...	18
				52	17	...	69
Grand Total				202	70	...	272

Products of Agricultural Labour the Produce of the Patna Division.

PRODUCTS OF AGRICULTURAL LABOUR.				1st Prize.	2nd Prize.	3rd Prize.	Total.
DEPARTMENT II.							
CLASS I.				Rs.	Rs.	Rs.	Rs.
<i>Country Dairy Produce.</i>							
1.	Best Fresh Butter not less than 2 lbs. in weight	...	...	8	4	...	...
2.	Best Cream Cheese of not less than 2 lbs. in weight	...	...	8	4	...	...
3.	Best Cows' Ghee not less than 20 seers in weight	...	...	8	4	...	...
4.	Best Buffaloes' Ghee not less than 20 seers in weight	...	...	8	4	...	...
				32	16	...	48
CLASS II.							
<i>Grain.</i>							
To be exhibited in samples of 5 seers as certified samples of not less than 10 maunds.							
5.	Wheat	...	...	15	...	...	...
6.	Barley	...	...	15	...	...	...
7.	Oats	...	...	15	...	...	...
8.	Indian Corn	...	...	5	...	...	...
9.	Bajra	...	...	5	...	...	...
10.	Jowar	...	...	5	...	...	...
11.	Table Rice	...	...	15	...	...	...
12.	Common Rice	...	...	15	...	...	...
13.	Impey	...	...	5	...	...	...
14.	Janera	...	...	5	...	...	...
15.	Kodou	...	...	5	...	...	...
16.	Oorid	...	...	5	...	...	...
17.	Moong	...	...	5	...	...	...
				115	...	...	115

PRODUCTS OF AGRICULTURAL LABOUR.				1st Prize.	2nd Prize.	3rd Prize.	Total.
CLASS III.							
<i>Pulse.</i>				Rs.	Rs.	Rs.	Rs.
To be exhibited in samples of 5 seers as certified samples of not less than 10 maunds.							
18.	Best Gram	...	...	15	...	...	...
19.	Best Peas ...	...	...	15	...	...	...
20.	Best Collection of Dals, five or more varieties	...	...	15	...	...	...
21.	Best Beans	...	...	5	...	...	...
				50	...	...	50
CLASS IV.							
<i>Tubers.</i>							
22.	Best Potatoes, 5 seers as samples of 5 maunds	...	...	15	...	...	...
23.	Best Sweet Potatoes, 5 seers as samples of 5 maunds	...	...	5	...	...	...
24.	Best Turmeric, 5 seers as samples of 1 maund	...	...	15	...	...	...
25.	Best Ginger, 5 seers as samples of 1 maund	...	...	5	...	...	...
26.	Best Arrowroot, 5 seers as samples of 1 maund	...	...	5	...	...	...
27.	Best Yams, 5 seers as samples of 1 maund ...	...	...	5	...	...	...
				50	...	...	50
CLASS V.							
<i>Fibres.</i>							
To be exhibited in samples of 5 seers as certified samples of not less than 5 maunds.							
28.	Jute	...	...	15	...	...	...
29.	Flax	...	...	15	...	...	...
30.	Sunn (of Sumraee Plant)	...	...	5	...	...	...
				35	...	...	35
CLASS VI.							
<i>Cotton and Wool.</i>							
The Cotton to be exhibited in samples of 2 seers as samples of not less than 5 maunds, each sample to be composed of a portion cleaned and a portion uncleaned.							
31.	Best Country Cotton from Foreign seed	...	...	15	...	...	...
32.	Best Indigenous Cotton	...	...	15	...	...	...
33.	10 Seers of Wool a sample of 5 maunds	...	...	15	10	...	...
				45	10	...	55
CLASS VII.							
<i>Dyes.</i>							
To be exhibited in samples of 1 seer as certified samples of not less than 5 seers.							
34.	Best Safflower	...	...	15	...	...	...
35.	Best Indigo, produced in the Division	...	...	20	...	...	...
36.	Best Shell Lac	...	...	15	...	...	...
37.	Best Lac Dye	...	...	15	...	...	...
				65	...	...	65

PRODUCTS OF AGRICULTURAL LABOUR.				1st Prize.	2nd Prize.	3rd Prize.	Total.
CLASS VIII.							
<i>Oil Seed.</i>				Rs.	Rs.	Rs.	Rs.
To be exhibited in samples of 5 seers as certified samples of 5 maunds.							
38.	Linseed	...	...	10	...	...	...
39.	Mustard	...	...	10	...	...	...
40.	Til Seed	...	...	10	...	...	...
41.	Castor Seed	...	...	10	...	...	...
42.	Poppy Seed	...	...	10	...	...	...
43.	Cotton Seed	...	...	10	...	...	...
				60	...	...	60
CLASS IX.							
<i>Tobacco.</i>							
44.	Best Native Tobacco, in leaf	...	...	15	...	...	...
				15	...	...	15
CLASS X.							
<i>Sugar Cane and Raw Sugar.</i>							
Ten Canes as the sample of the produce of not less than one quarter Behar Local Beegah.							
45.	Ordinary Country Cane	...	...	20	...	...	...
46.	Goor, 20 seers	...	...	5	...	...	...
				25	...	...	25
CLASS XI.							
<i>Honey and Wax.</i>							
47.	Honey in the Comb	...	...	10	5	...	...
	Wax, unbleached	...	...	10	5	...	...
				20	10	...	30
CLASS XII.							
<i>Spices.</i>							
48.	For the best collection of Spices grown in the Patna Division...			15	...	...	...
				15	...	...	15
Total				563	...	...	563

TOTALS.

LIVE STOCK	...	...	Cattle	...	...	620
			Horses, &c.	...	...	794
			Sheep, &c.	...	...	627
			Poultry	...	...	272

PRODUCE	...	...	Produce	...	...	2,313
						563

Grand Total ... 2,876

G. F. COCKBURN,
Commissioner of Patna, and
President of the Divisional Committee

The following gentlemen comprize the Tirhoot District Committee :—

A. J. ELLIOT, Esq., COLLECTOR ...	<i>President.</i>	A. URQUHART, Esq. ...	} <i>Ordinary Members.</i>
E. S. PEARSON, Esq. ...	} <i>Ordinary Members.</i>	S. MACDONALD, Esq. ...	
C. T. METCALFE, Esq. ...		J. NEALE, Esq. ...	
F. COLLINGRIDGE, Esq. ...		M. LLOYD, Esq. ...	
MAJOR J. DAWSON ...		J. C. GALE, Esq. ...	
„ W. R. IRWIN ...		M. GOLE, Esq. ...	
CAPTAIN J. C. C. DAUNT ...		C. SPENCER, Esq. ...	
J. M. BEECHER, Esq. ...		MOULVIE IMDAD ALI ...	
G. ANDERSON, Esq. ...		BABOO ROODER PERSHAD CHOWDRI ...	
W. COCKBURN, Esq. ...		MOULVIE MOULA BUKSH ...	
W. CAMPBELL, Esq. ...		BABOO NUTTOO LALL CHOWDRI ...	

TIRHOOT.

Proposed District Prize List for an Agricultural Exhibition to be held at Mozufferpore.

LIVE STOCK.		1st Prize.	2nd Prize.	3rd Prize.	4th Prize.	Total.
DEPARTMENT I.						
CLASS I.						
<i>Cattle.</i>						
1.	For the best Bull owned by a resident in Tirhoot, over 2 and under 5 years of age ...	50	30	...	...	80
2.	For the best Milch Cow with Calf at foot, owned by a resident in Tirhoot, under 7 years of age ...	50	30	...	...	80
3.	For the best pair of Bulls for draught, bred in Tirhoot ...	40	30	...	...	70
4.	For the best pair of draught Bullocks owned by a resident in Tirhoot ...	40	30	...	...	70
5.	For the best Buffalo Bull in Tirhoot ...	30	20	...	...	50
6.	Ditto ditto Cow, with Calf at foot ...	20	10	...	...	30
7.	Ditto ditto plough Bullocks in Tirhoot ...	25	15	...	...	40
14 Prizes, Total ...		...	...	...	...	420
CLASS II.						
<i>Horses and Ponies.</i>						
8.	For the best England Stallion kept expressly for breeding purposes by a resident in Tirhoot ...	75	50	...	...	125
9.	For the best brood Mare (of any breed) with Foal at foot or in Foal or certified to be kept for breeding purposes by a resident in Tirhoot ...	75	50	...	...	125
10.	For the best Colt, not over 2 years old, bred in Tirhoot ...	35	20	...	...	55
11.	Ditto ditto Filly, not over 2 years old, bred in Tirhoot ...	30	20	...	...	50
12.	Ditto ditto Pony or Galloway, over 12½ and under 14 hands, owned by a resident in Tirhoot ...	30	20	...	...	50
13.	For the best Ass ...	10	6	...	...	16
14.	Ditto ditto Hack, owned by a resident in Tirhoot ...	40	30	...	...	70
15.	Ditto ditto Fencer, owned by a resident in Tirhoot ...	40	30	...	...	70
16.	Ditto ditto Ekka Tats, owned by a resident in Tirhoot ...	20	15	10	5	50
20 Prizes, Total ...		...	...	...	...	611
CLASS III.						
<i>Sheep and Goats.</i>						
17.	For the best White Ram of any Indian breed other than fighting Rams ...	15	10	...	...	25
18.	For the best Ewes, to be exhibited in pens of 4, full mouthed ...	15	10	...	...	25
19.	Ditto ditto ditto from 4 to 6 teeth ...	12	8	...	...	20
20.	Ditto ditto ditto from 2 to 4 teeth ...	10	6	...	...	16
21.	Ditto ditto ditto Wethers, full mouthed ...	12	8	...	...	20
22.	Ditto ditto ditto from 4 to 6 teeth ...	10	6	...	...	16
23.	Ditto ditto ditto from 2 to 4 teeth ...	8	5	...	...	13
24.	Ditto ditto ditto Lambs ...	6	4	...	...	10
25.	Ditto ditto ditto She Goat in milk, short haired ...	10	8	...	...	18
26.	Ditto ditto ditto She Goat in milk, long haired ...	10	8	...	...	18
27.	Ditto ditto ditto Buck Goat ...	10	8	...	...	18
28.	Ditto ditto ditto Wether Goat ...	5	3	...	...	8
24 Prizes, Total ...		...	...	...	...	207

LIVE STOCK.					1st Prize.	2nd Prize.	3rd Prize.	4th Prize.	Total.
CLASS IV.					Rs.	Rs.	Rs.	Rs.	Rs.
<i>Poultry.—Fowls. (a.)</i>									
29.	Best pen of 5 Fowls, country-bred, 1 Cock and 4 Hens	...			10	5	...	...	15
30.	Ditto ditto Chittagong ditto ditto	...			10	5	...	...	15
31.	Ditto ditto Game Fowls ditto ditto	...			10	5	...	...	15
32.	Ditto ditto Fancy Fowls	...			10	5	...	...	15
33.	Ditto of 4 imported Fowls	...			10	5	...	...	15
34.	Ditto of any Capons	...			10	5	...	...	15
12 Prizes, Total					...	...	...	...	90
<i>Guinea Fowls. (b.)</i>									
35.	Best Pen of Guinea Fowls, 1 Cock and 3 Hens of any colour	...			10	5	...	...	15
36.	Best single Cock bird	...			5	...	...	...	5
37.	Best single Hen bird	...			5	...	...	...	5
6 Prizes, Total					...	...	...	...	25
<i>Turkeys. (c.)</i>									
38.	Best Pen of 4 Turkeys, 1 Cock and 3 Hens of any colour	...			16	8	...	...	24
39.	Best single Cock bird	...			6	...	...	...	6
40.	Best single Hen bird	...			6	...	...	...	6
6 Prizes, Total					...	...	...	...	36
<i>Geese. (d.)</i>									
41.	Best Pen of 1 Gander and 3 Geese	...			10	5	...	...	15
42.	Best Gander	...			4	2	...	...	6
43.	Best Goose	...			4	2	...	...	6
4 Prizes, Total					...	...	...	...	27
<i>Ducks. (e.)</i>									
44.	Best Pen of 1 Drake and 3 Ducks, common	...			6	4	...	...	10
45.	Ditto ditto ditto, fancy	...			6	4	...	...	10
46.	Best Drake	...			2	...	...	...	2
47.	Best Duck	...			2	...	...	...	2
6 Prizes, Total					...	...	...	...	24
<i>Pigeons. (f.)</i>									
48.	Best Cage of 3 pairs of different sorts	...			6	4	...	...	10
49.	Ditto pair of Sky Tumblers	...			6	4	...	...	10
50.	Ditto of Ground ditto	...			6	4	...	...	10
51.	Ditto ditto Pouters	...			6	4	...	...	10
52.	Ditto ditto Fantails	...			6	4	...	...	10
53.	Ditto ditto Carriers	...			6	4	...	...	10
54.	Ditto ditto Sherazees	...			3	2	...	...	5
55.	Other varieties in pairs	...			6	4	...	...	10
10 Prizes, Total					...	...	...	...	75
<i>Rabbits. (g.)</i>									
56.	Best Cage of 4 Rabbits of any breed	...			6	4	...	...	10
57.	Best Buck	...			6	4	...	...	10
58.	Best Doe	...			6	4	...	...	10
6 Prizes, Total					...	...	...	...	30
For Poultry 54 Prizes, Total					...	...	...	...	307

A B S T R A C T.

Cattle	...	14 Prizes, Rupees	...	420
Horses and Ponies	...	20 "	...	611
Sheep and Goats	...	24 "	...	207
Poultry	...	54 "	...	307
112 Prizes, Rupees				1,545

PRODUCTS OF AGRICULTURAL LABOUR.

1st Prize.	2nd Prize.	3rd Prize.	4th Prize.	Total.
------------	------------	------------	------------	--------

DEPARTMENT II.

CLASS I. •

Country Dairy Produce.

	Rs.	Rs.	Rs.	Rs.	Rs.
1. Best Fresh Butter not less than 2 lbs. in weight	5	3	...	...	8
2. Best Jar of Salt Butter not less than 5 lbs. in weight	5	3	...	...	8
3. Best Cheese of not less than 4 lbs. in weight	5	3	...	...	8
4. Best Cream Cheese of not less than 2 lbs. in weight	3	2	...	...	5
5. Best Cows' Ghee, not less than 20 seers in weight	10	5	...	...	15
6. Best Buffaloes' Ghee, not less than 20 seers in weight	10	5	...	...	15

Total

CLASS II.

Grain.

To be exhibited in samples of 5 seers as certified samples of not less than 10 maunds.

	Rs.	Rs.	Rs.	Rs.	Rs.
7. Wheat	7	5	4	...	16
8. Barley	7	5	4	...	16
9. Oats	7	5	4	...	16
10. Indian Corn	7	5	4	...	16
11. Bajra	7	5	4	...	16
12. Jowar	7	5	4	...	16
13. Table Rice	25	15	10	5	55
14. Common Rice	10	7	5	4	26
15. Impey	7	5	4	...	16
16. Janera	7	5	4	...	16

32 Prizes, Total

CLASS III.

Pulse.

To be exhibited in samples of 5 seers as certified samples of not less than 10 maunds.

	Rs.	Rs.	Rs.	Rs.	Rs.
17. Best Grain	7	5	4	...	16
18. Best Peas	7	5	4	...	16
19. Best Collection of Dals, 5 or more varieties	10	6	4	...	20

9 Prizes, Total

CLASS IV.

Tubers.

	Rs.	Rs.	Rs.	Rs.	Rs.
20. Best Potatoes, 5 seers as samples of 5 maunds	20	10	5	...	35
21. Best sweet Potatoes, ditto	8	5	3	...	16
22. Best Turmeric, 5 seers as samples of 1 maund	8	5	3	...	16
23. Best Ginger, ditto	9	5	3	...	16
24. Best Arrowroot, ditto	8	5	3	...	16
25. Best Yams, ditto	8	5	3	...	16

18 Prizes, Total

CLASS V.

Fibres.

To be exhibited in samples of 5 seers as certified samples, of not less than 5 maunds.

	Rs.	Rs.	Rs.	Rs.	Rs.
26. Flax	15	10	8	...	33
27. Sunn of Sunnaag Plant	12	8	6	...	26
28. Any other Fibre	12	8	6	...	26

9 Prizes, Total

CLASS VI.

Cotton and Wool.

The Cotton to be exhibited in samples of 2 seers as samples of not less than 5 maunds, each sample to be composed of a portion cleaned and a portion uncleaned (Hybrid Cotton).

	Rs.	Rs.	Rs.	Rs.	Rs.
29. Best Foreign Cotton	30	20	10	...	60
30. Best Country Cotton	30	20	10	...	60
31. Best Indigenous Cotton	20	10	5	...	35
32. Best Indigenous Cotton, samples of 5 maunds	20	10	5	...	35

12 Prizes, Total

190

PRODUCTS OF AGRICULTURAL LABOUR.					1st Prize.	2nd Prize.	3rd Prize.	4th Prize.	Total.
CLASS VII. <i>lyes.</i>					Rs.	Rs.	Rs.	Rs.	Rs.
To be exhibited in samples of 1 seer as certified samples of not less than 5 seers.									
33.	Best Safflower	...	...	...	10	5	...	...	15
34.	Best Indigo produced in the District	...	...	...	50	40	30	20	140
6 Prizes, Total					...	...	...	...	155
CLASS VIII. <i>Oil Seeds.</i>									
To be exhibited in samples of 5 seers as certified samples of 5 maunds.									
35.	Linseed	...	...	...	9	6	4	2	21
36.	Mustard	...	...	...	9	6	4	2	21
37.	Til Seed	...	...	...	9	6	4	2	21
38.	Castor Seed	...	...	...	9	6	4	2	21
39.	Mohwah Nut	...	...	...	9	6	4	2	21
40.	Kusoom Seed	...	...	...	9	6	4	2	21
41.	Poppy Seed	...	...	...	9	6	4	2	21
42.	Cotton Seed	...	...	...	9	6	4	2	21
32 Prizes, Total					...	...	...	...	168
CLASS IX. <i>Tobacco.</i>									
43.	Best Native Tobacco	...	...	...	20	10	6	...	36
44.	Best Foreign Tobacco	...	...	...	20	10	6	...	36
Total					...	...	...	...	72
CLASS X. <i>Sugar Cane and Raw Sugar and Food for Cattle.</i>									
Ten Canes as the sample of the produce of not less than one quarter Tirhoot Beegah.									
45.	Ordinary Country Cane (China)	...	...	...	20	10	7	...	37
46.	Bhoollee	...	...	...	15	10	7	...	32
47.	Rab, 20 seers	...	...	...	8	6	4	...	18
48.	Goor, 20 seers	...	...	...	8	6	4	...	18
49.	Shukker	...	...	...	8	6	4	...	18
50.	Bhōora	...	...	...	8	6	4	...	18
51.	Impey, 10 Canes	...	...	...	20	10	7	...	37
52.	Janera, 10 Canes	...	...	...	15	10	5	...	50
25 Prizes, Total					...	...	...	...	228
CLASS XI. <i>Honey and Wax.</i>									
53.	Honey in the Comb, sample of 2 seers	...	...	...	10	5	3	...	18
54.	Wax, unbleached, sample of 2 seers	...	...	...	6	4	2	...	12
6 Prizes, Total					...	...	...	...	30

A B S T R A C T.

Country Dairy Produce...	12 Prizes, Rs.	59
Grain	32 " "	209
Pulse	9 " "	52
Tubers	18 " "	115
Fibres	9 " "	85
Cotton and Wool	12 " "	190
Dyes	6 " "	155
Oil Seeds	32 " "	168
Tobacco	6 " "	72
Sugar Cane, &c.	25 " "	228
Honey and Wax	6 " "	30

In 2nd Department 167 Prizes, value 1,363
In both Departments 279 " " 2,908

Manufactures and Fine Arts.

An amount of 500 Rupees will be given in Prizes for —

1. Cotton Fabrics.
2. Woollen "

3. Fibrous manufactures.
4. Embroidered Fabrics and Brocades.
5. Jewellery, &c.
6. Hardware and Cutlery.
7. Porcelain and Pottery.
8. Furniture and Upholstery.
9. Ornamental carving in wood and ivory.
10. Leather manufactures.
11. Paper.
12. Fancy work in paper, wax, worsted bamboo, cane, beads, &c.
13. Conveyances.
14. Manufacture not already included

Photographic. *

In addition a Prize will be awarded for any other article of produce, &c., not included in the above List, and which may be considered deserving of one by the Judges.

A. J. ELLIOT,

Collector and President

The following gentlemen comprize the Patna District Committee:—

1. T. E. RAVENSHAW, Esq., *Collector of Patna and President of the Committee.*
2. T. C. TROTTER, Esq.
3. W. AINSLIE, Esq.
4. DR. J. SUTHERLAND.
5. W. R. LARMINIE, Esq.
6. C. F. WORSLEY, Esq.
7. W. TAYLOR, Esq.
8. J. CRUICKSHANK, Esq.
9. A. N. COLE, Esq.
10. MAJOR H. C. ADLAM.
11. MAJOR C. L. BROWN.
12. LIEUTENANT G. L. KEIR.
13. F. SMYTH, Esq.
14. SYED ZAINOODEEN HUSSUN KHAN.
15. BABOO HEERALOLL DUTT.
16. SYED FIDA ALLY KHAN.
17. DEWAN MOULA BUKSH KHAN BAHADOOR.
18. CAZEE MUHAMUD IZHAROO DEEN KHAN.
19. SYED VILAIT ALLY KHAN.
20. RAI HURREH KISHOON.
21. RAI BAIJNATH PERSHAD.
22. KOONWUR SOOKRAJ BAHADOOR.
23. MOONSHEE MONOHUR LOLL.
24. BABOO MUDDON MOHUN LOLL.
25. „ PROSUNNO COOMAR SINGH.
26. „ MOHUN LOLL.
27. MOULAVIE SAKHAWUT HOSSEIN KHAN.
28. SYED ALTAFF HOSSEIN KHAN.
29. „ LOOTF ALLY KHAN.
30. „ MUHAMUD BAKAR KHAN.
31. „ MUHAMUD HOSSEIN KHAN.
32. MOONSHEE ABDOL HYE.

List of Prizes proposed to be awarded for a Show of Live Stock and Products of Agricultural Labour of the District of Patna, at the Divisional Agricultural Exhibition to be held at Morufterpore in the District of Tirhoot, commencing 12th January 1865.

DESCRIPTION OF ANIMALS, &c.	1st Prize.	2nd Prize.	Total.
Cattle.	Rs.	Rs.	Rs.
Best country-bred Cow of any age ...	25	20	...
Best country-bred She Buffalo of any age ...	20	...	...
Best pair of plough Cattle bred in the Patna Division ...	25	20	...
Best country-bred Bull ...	25	...	...
Horses.			
Best country-bred Colt or Filly ...	25	...	...
Best Pair of 1st, 2nd and 3rd ...	20	...	...

DESCRIPTION OF ANIMALS, &c.	1st Prize.	2nd Prize.	Total.
Sheep and Goats.	Rs.	Rs.	Rs.
Best White Ram, other than fighting, of 4 teeth and upwards ...	20	...	...
Best White Ram under 4 teeth ...	15	...	...
Best country-bred White Ewes in Pens of 4, viz. :—Full mouthed ...	15	...	...
4 to 6 toothed ...	12	...	...
2 to 4 toothed ...	10	...	...
Lambs ...	10	8	...
Best Buck Goat of any age ...	15	...	...
Best Pen of 4 She Goats, short haired ...	15	10	...
Ditto of 4 Patna Wethers of any age ...	15	...	...
Poultry.			
Best Pen of 4 Turkeys, 1 Cock and 3 Hens, of any colour ...	15	...	...
Best Pen of 4 Guinea Fowls, 1 Cock and 3 Hens, of any colour ...	10	...	...
Best Pen of 4 Game Fowls, 1 Cock and 3 Hens, of any colour ...	10	...	...
Best Pen of 4 Fowls, 1 Cock and 3 Hens (country-bred) ...	10	...	...
Best Pen of Feathered Bantams, 1 Cock and 3 Hens ...	8	...	...
Best Pen of 4 Capons of any breed ...	8	...	...
Geese and Ducks.			
Best Pen of 1 Gander and 3 Geese ...	8	...	...
Ditto of 1 Drake and 3 Ducks ...	8	...	...
Rabbits.			
Best Pen of 4 Rabbits, 1 Buck and 3 Does ...	10	...	...
Pigeons.			
Best pair of Shirazees ...	6	...	...
Ditto of Sky Tumblers ...	6	...	...
Ditto of Ground Tumblers ...	6	...	...
Ditto of Pouters ...	6	...	...
Ditto of Fantails ...	6	...	...
Grain.			
To be exhibited in quantities of 5 seers, as certified samples, by any member of the Committee, of not less than 10 maunds.			
Best Patna grown Wheat ...	25	...	...
Ditto ditto Bunsunney Rice ...	25	...	...
Ditto ditto Osana Rice ...	20	...	...
Ditto ditto Oats ...	20	...	...
Best Indian Corn ...	10	...	...
Best samples of Murwa, Kodoo, &c. ...	20	...	...
Pulse.			
To be exhibited as above.			
Best Patna grown Gram ...	20	...	...
Ditto ditto Peas ...	10	...	...
Ditto ditto Moong ...	10	...	...
Ditto ditto Arhur ...	10	...	...
Ditto ditto Chillies ...	10	...	...
Tubers.			
To be exhibited as above, being certified samples of 1 maund.			
Best Patna grown Potatoes ...	15	...	...
Ditto ditto Onions ...	10	...	...
Ditto ditto Ginger ...	10	...	...
Ditto ditto Turmeric ...	10	...	...
Oil Seeds.			
Best Patna grown Linseed ...	6	4	...
Ditto ditto Mustard Seed ...	6	4	...
Ditto ditto Castor Seed ...	6	4	...
Total	627	70	697

(Sd.) T. E. RAVENSHAW,
Collector and President, Local Committee
of the Agricultural Show of Patna.

G. F. COCKBURN,
Commissioner of Patna,
and President of the Divisional Committee.



SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, OCTOBER 5, 1864.

OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE will henceforward be published, containing such Official Papers and Information as the Government of Bengal may deem to be of interest to the Public, and such as may usefully be made known.

Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on a payment of six Rupees per annum if delivered in Calcutta, or twelve Rupees if sent by Post.

No Official Orders or Notifications, the publication of which in the GAZETTE is required by Law, or which it has been customary to publish in the GAZETTE, will be included in the SUPPLEMENT. For such Orders and Notifications the body of the GAZETTE must be looked to as heretofore.

Official Correspondence.

From E. H. LUSHINGTON, Esq., Secretary to the Government of India, Financial Department, to the Secretary to the Government of Bengal,—(No. 1444, dated Simla, the 19th July 1864.)

FINANCIAL DEPARTMENT.
SEPARATE REVENUE.

WITH reference to letter from this Department No. 159, dated 13th January 1864, I am directed to forward, for the information of the Hon'ble the Lieutenant-Governor, copy of a Separate Revenue Despatch from the Right Hon'ble the Secretary of State for India, No. 10, dated 16th May 1864, and of its enclosure, and to request that the Government of India may be favored with an early opinion on the suggestions contained in the correspondence adverted to in paragraph 1, and a report on the subject of paragraph 3, thereof.

From the RIGHT HON'BLE SIR CHARLES WOOD, Bart., M. P. and C. C. B., Her Majesty's Secretary of State for India, to His Excellency the Right Hon'ble the Governor General of India in Council,—(No. 10, dated India Office, London, the 16th May 1864.)

REVENUE (SEPARATE.)

WITH reference to the Financial letter from

Mr. Merivale to Mr. Tollemache, M. P., dated 26th April 1864.

Mr. Merivale to Salt Chamber of Commerce, dated 26th April 1864.

Mr. Tollemache, M. P., to Sir Charles Wood, dated 6th May 1864, (with enclosure.)

Salt Chamber of Commerce to Sir Charles Wood, dated 26th April 1864.

line of the plan which you proposed to adopt for the disposal of the Government Stock of Salt in Bengal. I have now received their replies, and I

forward to you, herewith, copies of the correspondence for your consideration and for communication to the Lieutenant-Governor of Bengal.

2. I approve generally of the plan proposed, subject to such modifications as you may see fit to adopt on the receipt of this Despatch. You will of course furnish me with a copy of the formal Notification which the Government of Bengal has been requested to prepare and submit for your approval.

3. With regard to the other point referred to in this correspondence, I do not understand why it should have been considered necessary, in the present depressed state of the Salt market at Calcutta, to call upon Importers who hold Salt under Bonds to pay up the full amount of Duty on the expiration of those Bonds. If such an order has been issued, as alleged, I desire to be informed of the circumstances which, in the opinion of the Government, rendered such a step expedient.

From HERMAN MERIVALE, Esq., to JOHN TOLLEMACHE, Esq., M. P.,—(dated India Office, the 26th April 1864.)

WITH reference to Mr. Melvill's letter to you of the 31st July 1863, I am directed by the Secretary of State for India in Council to inform you that he has just received from the Government of India an intimation of their intention to take measures for disposing of the Stock of Salt now in the possession of the Government of Bengal. That Stock amounts to about 75,00,000 maunds. and the Government have resolved that of this quantity 15,00,000 of maunds shall be sold by auction, after twelve months' notice, in the course of the year 1865, in such proportions and at such times as may be most convenient to the trade, and that the remainder shall be sold in 1866 and the two following years in the same manner, at the rate of 20,00,000 maunds in each year. An upset price, calculated with reference to the prevailing market prices of the kinds of Salt which are to be sold, will be fixed, in order to prevent combinations among the dealers; but the Government do not



SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, OCTOBER 5, 1864.

OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE will henceforward be published, containing such Official Papers and Information as the Government of Bengal may deem to be of interest to the Public, and such as may usefully be made known.

Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on a payment of six Rupees per annum if delivered in Calcutta, or twelve Rupees if sent by Post.

No Official Orders or Notifications, the publication of which in the GAZETTE is required by Law, or which it has been customary to publish in the GAZETTE, will be included in the SUPPLEMENT. For such Orders and Notifications the body of the GAZETTE must be looked to as heretofore.

Official Correspondence.

From E. H. LUSHINGTON, Esq., Secretary to the Government of India, Financial Department, to the Secretary to the Government of Bengal,—(No. 1444, dated Simla, the 19th July 1864.)

FINANCIAL DEPARTMENT.
SEPARATE REVENUE.

WITH reference to letter from this Department No. 159, dated 13th January 1864, I am directed to forward, for the information of the Hon'ble the Lieutenant-Governor, copy of a Separate Revenue Despatch from the Right Hon'ble the Secretary of State for India, No. 10, dated 16th May 1864, and of its enclosure, and to request that the Government of India may be favored with an early opinion on the suggestions contained in the correspondence adverted to in paragraph 1, and a report on the subject of paragraph 3, thereof.

From the RIGHT HON'BLE SIR CHARLES WOOD, Bart., M. P. and C. C. B., Her Majesty's Secretary of State for India, to His Excellency the Right Hon'ble the Governor General of India in Council,—(No. 10, dated India Office, London, the 16th May 1864.)

REVENUE (SEPARATE.)

WITH reference to the Financial letter from

Mr. Merivale to Mr. Tollemache, M. P., dated 28th April 1864.

Mr. Merivale to Salt Chamber of Commerce, dated 28th April 1864.

Mr. Tollemache, M. P., to Sir Charles Wood, dated 6th May 1864, (with enclosure.)

Salt Chamber of Commerce to Sir Charles Wood, dated 29th April 1864.

your Excellency in Council, dated the 8th of March last, (No. 40,) I have to acquaint you that I communicated to Mr. John Tollemache, M. P., for South Cheshire, and to the Salt Chamber of Commerce at Northwich, an out-

line of the plan which you proposed to adopt for the disposal of the Government Stock of Salt in Bengal. I have now received their replies, and I

forward to you, herewith, copies of the correspondence for your consideration and for communication to the Lieutenant-Governor of Bengal.

2. I approve generally of the plan proposed, subject to such modifications as you may see fit to adopt on the receipt of this Despatch. You will of course furnish me with a copy of the formal Notification which the Government of Bengal has been requested to prepare and submit for your approval.

3. With regard to the other point referred to in this correspondence, I do not understand why it should have been considered necessary, in the present depressed state of the Salt market at Calcutta, to call upon Importers who hold Salt under Bonds to pay up the full amount of Duty on the expiration of those Bonds. If such an order has been issued, as alleged, I desire to be informed of the circumstances which, in the opinion of the Government, rendered such a step expedient.

From HERMAN MERIVALE, Esq., to JOHN TOLLEMACHE, Esq., M. P.,—(dated India Office, the 28th April 1864.)

WITH reference to Mr. Melvill's letter to you of the 31st July 1863, I am directed by the Secretary of State for India in Council to inform you that he has just received from the Government of India an intimation of their intention to take measures for disposing of the Stock of Salt now in the possession of the Government of Bengal. That Stock amounts to about 75,00,000 maunds, and the Government have resolved that of this quantity 15,00,000 of maunds shall be sold by auction, after twelve months' notice, in the course of the year 1865, in such proportions and at such times as may be most convenient to the trade, and that the remainder shall be sold in 1866 and the two following years in the same manner, at the rate of 20,00,000 maunds in each year. An upset price, calculated with reference to the prevailing market prices of the kinds of Salt which are to be sold, will be fixed, in order to prevent combinations among the dealers; but the Government do not

place themselves under any obligation to fix the upset price according to any precise data.

2. A copy of this letter will be forwarded to the Salt Chamber of Commerce at Northwich for their information.

From HERMAN MERIVALE, Esq., to the Secretary, Salt Chamber of Commerce, Northwich,—(dated India Office, the 28th April 1864.)

I AM directed by the Secretary of State for India in Council to forward to you, for the information of the Salt Chamber of Commerce at Northwich, copy of a letter which has been this day addressed to Mr. John Tollemache, M. P., relative to the measures about to be taken by the Government of India for the disposal of the Government Stock of Salt in Bengal.

2. A copy of the formal Notification which the Government of Bengal has been instructed to prepare will be forwarded to you immediately on its receipt in this Office.

From JOHN TOLLEMACHE, Esq., M. P., to the RIGHT HON'BLE SIR CHARLES WOOD, Bart., M. P. and G. C. B., Her Majesty's Secretary of State for India,—(dated the 6th May 1864.)

At the request of the Northwich Salt Chamber of Commerce, I beg to forward the accompanying answer to the communication with which you favored them on the 28th of last month.

The Members of the Chamber make, in their answer, two suggestions that I have underlined, with which, I venture to hope, you will be able to comply.

There is another matter which I beg to submit to your consideration. Lately a notice has been issued by the Authorities at Calcutta, calling on those Importers who have Salt in Bond to pay forthwith the Duty on the Bonds which have expired. These Importers pray that the course may be pursued of allowing the payment of the Duty to be deferred until the Salt is sold for consumption.

I take the liberty of enclosing to you a letter on this subject from Mr. deMattos.

From W. N. DEMATTOS, Esq., to W. HADFIELD, Esq., Secretary to the Salt Chamber of Commerce,—(dated 27, Leadenhall Street, the 25th April 1864.)

MESSRS. ASHBURNER AND CO. write from Calcutta, under date March 20th 1864:—

“Government are now calling on us to pay the Duty on the Salt bonded under Bonds which have expired. If this be enforced, we shall have to pay on the old Bonds which cover 3,00,000 maunds, Rupees 9,75,000 for Duty at Rupees 3-4 per maund, or sell the Salt at best prices obtainable, in which latter case the proceeds would hardly cover the charges incurred.

“You will easily perceive that this will be a great hardship as it is only now that (the Indian Government having come to a determination as to the periodical disposal of their own large Stock of Salt) an advance in price may be looked for, and thus enable the various holders of imported Salt to gradually relieve their Stocks, upon which they have already lost a very large amount in charges and interest without having to add to it the frightful incubus which the Indian Government are now disposed to do.”

Kindly submit this to Mr. Tollemache, and through him to Sir Charles Wood, so as to get this Duty question placed on the ordinary footing

of only paying it when cleared for actual consumption.

From JOHN CORRETT, Esq., Deputy Chairman to the Salt Chamber of Commerce, to the Secretary of State for India, India Office,—(dated Northwich, the 29th April 1864.)

THIS Chamber have to thank the Hon'ble Council for India for their communication of the 28th instant, and they are of opinion that the plan suggested by the letter referred to, for the disposal of the Government Stock of Salt in India, is the best which could be adopted under existing circumstances.

They take leave to suggest that the dates for the sales should be fixed for the 1st July in each year, and that the upset price which Government mean to put on should be published no sooner than on the day of sale, as it would otherwise lead to probably disastrous combinations of the dealers.

This Chamber have further to urge upon your Hon'ble Council a lenient construction of the bonding system at Calcutta. Lately another notice was issued by the Calcutta Board to clear all old Bonds, and Importers were requested to pay the Duty upon their Stocks. The Chamber hope that, like on a former occasion, this order will be reversed again; but in the meantime it causes great consternation amongst Importers, which, of course, re-acts disastrously upon the trade.

The Chamber take this opportunity of expressing their humble acknowledgments of the courtesy and attention shown their trade by your Hon'ble Council.

From the HON'BLE A. EDEN, Secretary to the Government of Bengal, to the Secretary to the Government of India, Financial Department,—(No. 2602T., dated Darjeeling, the 29th August 1864.)

WITH reference to your No. 1444, dated the 19th ultimo, and enclosures, I am directed to inform you that the Board of Revenue have been asked for an expression of their views on the several points discussed by the Right Hon'ble the Secretary of State. In the meantime the Lieutenant-Governor desires me to transmit, herewith, copy of a letter addressed to the Board on the 26th of November 1863, No. 4444, in order that the Home Government may be informed of what has been done in regard to the Bonds noticed in the 3rd paragraph of the Secretary of State's Despatch of the 16th May last, No. 10.

From S. C. BAYLEY, Esq., Junior Secretary to the Government of Bengal, to the Junior Secretary to the Board of Revenue,—(No. 4444, dated the 26th November 1863.)

I AM directed to acknowledge the receipt of your letter No. 1414, dated the 16th instant, proposing an alteration of Section 114, Act VI. of 1863, in regard to Bonders of Salt, and in reply to state that the Lieutenant-Governor does not think that by the Section Government is absolutely precluded from making a special arrangement with Bonders whereby the payment of Duty shall be deferred for a period exceeding three years, if from special circumstances it appears expedient to do so. Section 114 is intended simply for the protection of Government, and its object is to secure to Government the payment of Duty within three years; but if Government wishes to waive the advantages which it derives under this Section, it is presumed that it has a right to do so. The

Advocate-General's Opinion on the subject is herewith forwarded for the Board's information, and the form of the renewed Bond should, I am to add, be drawn up in communication with that Officer.

2. There is the gravest objection to an amendment of the Law, and the circumstances which render an extension of the period of bonding necessary are avowedly exceptional and are not likely to occur again.

3. In conclusion I am to state that the Bonders should be compelled to move from the Howrah Golahs when the term of the first Bond expires.

From H. T. PRINSEP, Esq., Officiating Junior Secretary to the Board of Revenue, Lower Provinces, to the Secretary to the Government of Bengal,—(No. 784, dated the 5th September 1864.)

In reporting on the questions raised in the correspondence forwarded by your Memorandum No. 2711, dated 3rd ultimo, for an expression of the views entertained by the Board, I am directed to state that the Board have no objection to the suggestions of the Salt Chamber of Commerce, Northwich, that the annual sales of Government Salt should be fixed for the 1st of July, and that the upset price should be published no sooner than on the date of sale, and with the permission of Government the Board will be prepared to give due effect thereto.

2. As regards the complaint that, notwithstanding the depressed state of the Salt market in Calcutta, the Board have called upon Importers who hold under Bonds to pay up the full amount of Duty on the expiration of those Bonds. I am directed to explain that, whenever the term of a Bond has expired and no application for its renewal has been made, the Collector of Customs is in the habit of making a call in the lithographed form hereto annexed. The term of all Bonds is, under Section 79, Act VI. of 1863, limited to three years; but in the case of Salt, the Government, on the 26th November 1863, No. 444, acting on the opinion of the Advocate-General, extended that term to five years. Under these circumstances the Board consider that the Collector of Customs is bound, after the expiry of a Bond, to demand the Duty leviable thereon, unless the Bonder can produce an authority for its renewal; and I am to add that in the opinion of the Board the term should not be exceeded without the express orders of Government.

3. With regard to the complaint of Messrs. Ashburner and Co. in their letter to Mr. deMattos, of London, which has given rise to the reference under report, I am further to explain that, from enquiries that have been made from that firm and the Collector of Customs, the Board find that the demand for payment of Duty was made after the expiry of the currency of the Bond, no application having been made for its renewal, and I am to add that, except in a recent case, under special circumstances, the Board have never refused to grant renewal to the holder of an expired Bond.

No.

FROM

Collector of Customs, Calcutta,

TO

Calcutta,

Dated the

186

GENTLEMEN,

THE period allowed for goods to remain in Bond having expired in respect to the undermentioned goods bonded by you, I have the honor to request you will be so good as to adjust the Duty and charges due on the same without delay.

I have the honor to be,

GENTLEMEN,

Your most obedient Servant,

Collector of Customs.

From S. C. BAYLEY, Esq., Junior Secretary to the Government of Bengal, to the Officiating Junior Secretary to the Board of Revenue,—(No. 3344T, dated Darjeeling, the 19th September 1864.)

I AM directed to acknowledge the receipt of your letter No. 784, dated the 8th instant, submitting the Board's views on the measures proposed in England for reducing the Government Stock of Salt in Bengal.

2. In reply I am to say that the Lieutenant-Governor concurs with the Board in the view they have taken of the suggestions of the Salt Chamber of Commerce at Northwich regarding the annual sales of Government Salt.

3. In regard to the renewal of Bonds for the Duty on imported Salt, I am to say that whenever an application is made and no special reasons existing against such a concession the Bonds should be removed. If no application is made to renew the Bond, the Collector of Customs is quite right on its expiry to demand the Duty.

From the HON'BLE A. EDEN, Secretary to the Government of Bengal, to the Secretary to the Government of India, Financial Department,—(No. 3345T, dated Darjeeling, the 19th September 1864.)

IN continuation of my No. 2602T, dated the 29th ultimo, I am directed by the Lieutenant-Governor to forward, for the information of the Home Government, the accompanying copy of papers* relative to the measures proposed in England for reducing the Government Stock of Salt in Bengal. It will be seen that the Lieutenant-Governor concurs with the Board in approving of the suggestion made by the Salt Chamber of Commerce at Northwich in regard to the annual sales of Government Salt.

* From Board, No. 784, dated 8th instant.
To " " 3344, " this day.



SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, OCTOBER 26, 1864.

OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE will henceforward be published, containing such Official Papers and Information as the Government of Bengal may deem to be of interest to the Public, and such as may usefully be made known.

Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on a payment of six Rupees per annum if delivered in Calcutta, or twelve Rupees if sent by Post.

No Official Orders or Notifications, the publication of which in the GAZETTE is required by Law, or which it has been customary to publish in the GAZETTE, will be included in the SUPPLEMENT. For such Orders and Notifications the body of the GAZETTE must be looked to as heretofore.

Papers on the subject of improving the breed of Cattle, in continuation of those published on the 17th August 1864.

From S. C. BAYLEY, Esq., Junior Secretary to the Government of Bengal, to the Secretary to the Board of Revenue, Lower Provinces,—(No. 3224, dated the 6th August 1864.)

I AM directed to forward, for the information of the Board, the accompanying copy of a correspondence*

* General Proceedings for August 1863, No. 81.

General Proceedings for March 1863, Nos. 43-46.

Letter from Agricultural Society, dated 29th March 1864, with one enclosure.

Letter from Government of India, Military Department, No. 612, dated 16th March 1864, with two enclosures.

Letter to Government of India, Military Department, No. 923T, dated 30th June 1864.

Letter to Agricultural Society dated 20th July 1864, No. 3081.

Letter from Agricultural Society, dated 27th July 1864, with one enclosure.

of the Board, the accompanying copy of a correspondence* which has taken place between this Government and the British Indian Association, the Landholders' and Commercial Association, the Agricultural Society, and the Government of India on the subject of improving the breed of Bengal cattle and the cultivation of vegetables for the consumption of European Troops.

2. The correspondence will be published in the *Calcutta Gazette* Supplement, and copies of it will be forwarded to the Commissioners of Divisions for distribution among the Zemindars and other persons likely to read it and to profit by the information it contains.

3. I am desired to request that the Board will be so good as to consider the subject and report what further practical measures can be taken by the Government with a view to give effect to the recommendations of the Agricultural Society.

Circular from S. C. BAYLEY, Esq., Junior Secretary to the Government of Bengal, to the Commissioner of —(No. 3225, dated the 6th August 1864.)

I AM directed to forward, herewith, 100 copies of the correspondence which has recently passed on the subject of improving the breed of Bengal cattle and the cultivation of vegetables for the consumption of European Troops.

2. You are requested to distribute these papers among the Zemindars and other persons likely to read them and to profit by the information they contain.

From R. B. CHAPMAN, Esq., Secretary to the Board of Revenue, Lower Provinces, to the Secretary to the Government of Bengal,—(No. 349, dated the 7th September 1864.)

IN reply to Government order No. 3224, dated 6th August, I am directed by the Board of Revenue to say that, except by the liberal and enlightened encouragement of Cattle Shows and Fairs in which the Government is already engaged, the Board do not think that the Government can practically do much to improve the breed of cattle in Bengal.

2. The conditions of the permanent settlement effectively and decisively preclude any such interference by the Government with the arrangements of the Landholders in Bengal, as is suggested in the 3rd paragraph of the Report of the Special Committee of the Agricultural Society submitted to Government with the Society's letter of the 29th March.

3. If Landholders are not sufficiently alive to their own interests or duties to provide proper food for the cattle of their Estates, whether by setting aside grazing grounds or promoting the growth of nutritious fodder, it would be perfectly useless for the Government to attempt, by proceedings which, to be effectual must be most offensive and inquisitorial, to supply the necessary impetus.

4. The Board can only hope that if, as is probable, the greatly increased value of agricultural produce has led to the curtailment of the proper supply of food to the cattle, the evil effects of so short-sighted a policy may rapidly compel those interested to apply the remedy which is in their own hands, and which is not in the hands of the Government. The production of good crops cannot be kept up without good cattle, and it may therefore be reasonably expected that the very increase in the value of the crops which has, at the outset, told to the injury of the cattle will presently lead to their improvement.

5. I am to add that the Second Member did not, as President of the Agricultural and Horticultural Society, concur in the adoption of their report to Government, and that his own views are much more in accordance with those of the Landholders' Association.

Further Papers on the subject of Indigo Cultivation in the Nuddea District.

From H. L. DAMPIER, Esq., Commissioner of the Nuddea Division, to the Secretary to the Government of Bengal,—(No. 194, dated the 8th September 1864.)

WITH reference to paragraph 6 of my letter No. 73, dated 6th May 1864, I have the honor to forward, for the information of His Honor the Lieutenant-Governor, translation of a portion of a lease which Mr. A. Hills, of Katchikatta, has just sent me. Mr. Hills states that he gives a Deed in this form to every Ryot in his elakah who has made a Contract for Indigo, and that it is the fault of the Dowkee Ryots themselves that they will not accept such leases.

2. It will be seen that the remission of rent which is made in the present instance is nearly Rupees 75 on the entire holding, and this is allowed in consideration of the tenant cultivating 5 beegahs of Indigo, which is equivalent to a payment of 15 Rupees a beegah in addition to the payment for produce delivered, as stipulated in the separate Deed of Indigo Contract.

3. It has always been urged on the part of the Planter that the Ryot derived very great contingent advantages from the cultivation of Indigo; but the distinct definition of these advantages and their specification in a document which binds the Planter Landlord is a new feature. If the system be fairly carried out it will meet many of the objections which are ordinarily advanced against the one-sided character of the arrangements between Planters and Ryots; and it cannot, I think, fail gradually to smooth away much of the difficulty which the Planter has hitherto experienced in inducing the Ryots to enter into Indigo Contracts and to act up to them when entered into.

4. Some proceedings have lately come before me from which it appears that Mr. Tripp, the Manager of the Mulnaath Concern, has, in one village at least, been giving documents guaranteeing a certain rate of rent in exchange for engagements to cultivate Indigo. I wish the system were universally adopted.

5. The impression now prevails that the tenants on an estate which happens to be held by

a Planter are served with notices of enhancement of rent, and are sued for rent at enhanced rates for the sole object of putting pressure on them to grow Indigo. It is believed that, if Indigo were out of the question, the Landlords of these estates would not take measures to enforce such immediate enhancement. As long as Indigo is looked upon as being practically the cause of the enhancement, it cannot be expected that its cultivation will be popular with the Ryots, even though the mitigation of the evil of enhancement be secured to them by a formal document.

6. If, however, 1 Rupee per beegah (speaking roughly) be a fair and equitable rate of rent in the neighbourhood, this cause of unpopularity will gradually disappear, for sooner or later the neighbouring Landlords, who are not Planters, will exact that rate, and then it may be that Indigo, being no longer regarded as the cause of enhancement, its cultivation will really be appreciated as an equivalent for a portion of the rent which is advantageous to both parties. On the other hand if the Rupee per beegah be so high that it cannot practically be levied, the Planter can scarcely be blamed for availing himself of the advantages given to him by a rate of rent which has been judicially fixed.

7. But to give weight to the argument that the Planters are making no more than legitimate use of the advantages which the late judicial decisions on rent have put into their hands, it is necessary that, however far they may go in the exercise of their legal powers, they should do so fairly; and that they should be careful not to take advantage of the Ryot's ignorance and credulity by threatening him with the exercise of powers which they do not possess. The following extract from a letter of the Collector of Nuddea gives an instance of what a Planter should not do if he wishes to strengthen the position of those who maintain that he is only making a legitimate use of his legal powers as Landlord:—"After the expiration of the Bengalee month Cheyt a complaint was once made to me by the Manager of an Indigo Factory that certain Notices under Section XIII. of Act X. which he had requested a Sub-Divisional Officer to serve had not been served on the Ryots. I promised that I would enquire into the matter, but pointed out at the same time that as the period allowed by law had expired I could not then enforce the service of the notices. The reply to this remark was that service of the notices after the expiration of the time allowed by law would serve the applicant's purpose equally well, as the object was not in reality to enhance the ryots' rent, but to bring them to terms with the Factory."

Translation of the Pottah or Deed of Engagement granted by Mr. A. Hills, of Katchikatta Factory, to Mookhai Joardar, of Alchura, on the 6th November 1863.

TO MOOKHAI JOARDAR.

THIS is a Deed of Pottah. I have obtained against you on the service of a notice a decree for the amount of rent which you will have to pay annually on account of the lands which are in your possession in Mouzah Alchura, Dahan Bohunbarea, in my Patnee Talook Perganah Bhandardoh. You have bound yourself to

cultivate under your own management 5 out of the 160 beegahs of land you hold of me with Indigo for the Poradoho Factory, either in the Kartica or Bataba season, according as I will direct. You have now applied to obtain a Pottah. This I grant to you. The decree awards the rate of the *Mathan lands* at 1 Rupee per beegah, but I show you some consideration on the above ground by fixing the rate to 8 annas 6½ pie per beegah, and making a settlement of the entire 160 beegahs, consisting of *Bastoo* (for habitation) and *Mathan* (for cultivation) lands, of the prevailing *haut* of 18 inches, at a gross rental of Rupees 90-14-5 per annum, as shown in the subjoined detail. You have willingly agreed to the settlement and executed a counter-engagement with conditions that you will pay in the rent annually according to the instalments to be fixed, in violation of which you will be liable to pay interest at the rate of 1 Rupee per cent. per month. If in contravention of the terms of the Shatta or Indigo engagement, which you have separately executed, you neglect to cultivate under your own management the above-mentioned quantity of land with Indigo, or negligently fail to supply the plant, you will have, without any objection, to pay with interest annually the full rate of 1 Rupee per beegah for *Mathan* lands as awarded by the decree. After the expiry of the term of the Indigo Shatta you will execute a fresh one for the same quantity of land. You will engage yourself to the cultivation of Indigo in conformity with the terms of that Kobooleut. If you do not execute the engagement, or make pretences so as to delay its execution, then I will

NOTE.—Mr. Hills writes:—
“In the instance of one village objection has been raised to this clause by the Ryots, and wherever right of occupancy exists it will in the future be rescinded.”

against which no objections, either of yourself, your heirs or representatives, will be of any avail. You will have to pay rent at a similar rate for the lands which will be found, on investigation, in your possession in excess of the above quantity.

From the Hon'ble A. EDEN, Secretary to the Government of Bengal, to the Commissioner of the Nuddea Division,—
(No. 8442T., dated Darjeeling, the 22nd September 1864.)

I am directed to acknowledge the receipt of your letter No. 194, dated the 8th instant, submitting a specimen of a Deed which Mr. Hills, of Kanchikato, offers to every Ryot in his estate who contracts to sow Indigo for him.

2. The Lieutenant-Governor concurs with you in thinking that the distinct specification in a formal Deed of the advantages which the Planter offers to the Ryot in return for his consent to sow Indigo for the Planter is likely to be attended with very favorable results in smoothing away the difficulties which now exist in the relation between Planter and Ryot.

3. The Deed, of which you have submitted a copy, offers, I am to observe, to the Ryot a tangible return for his consent to grow Indigo; but the Lieutenant-Governor still thinks that misunderstanding and ill-feeling would be obviated if the rearing on of Indigo was entirely separated from all question of rent, and treated, like other branches of trade, on its own merits.

4. The clause in the Deed entered on the margin would appear to be of doubtful legality in the case of Ryots having rights of occupancy, but it is satisfactory to notice that it is to be omitted from future leases on Mr. Hills' estates.

5. I am to request that you will explain what is the precise nature of the objections that the Ryots make to the cultivation of Indigo on the terms now offered by Mr. Hills.

Abolition of Slavery in Cooch Behar.

From LIEUTENANT-COLONEL J. C. HAUGHTON, Commissioner of Cooch Behar, to the Secretary to the Government of Bengal,—(No. 295, dated the 19th September 1864.)

I HAVE the honor to report, for the information of the Hon'ble the Lieutenant-Governor, that the abolition of Slavery in Cooch Behar was formally proclaimed at a public Durbar held at the celebration of the Poonea Festival on 7th instant, on which occasion a Regulation printed in the Bengalee language, embodying the provisions of the Penal Code, Sections 359 to 374, was distributed.

Papers regarding the conduct of Native Officials in Assam in connection with the purchase of Waste Land.

From J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, to F. R. COCKERELL, Esq., Officiating Secretary to the Government of Bengal,—
(dated the 11th February 1864.)

I AM directed by the Committee to bring to the notice of His Honor the Lieutenant-Governor a complaint which has been made by the Upper Assam Tea Planters' Association regarding the conduct of certain of the Native Officials of the Courts in that Province who are alleged to have run up the price of waste lands at the auctions without intending to purchase, and without being in a position to make good the payment of the cost of the land.

2. The Association in question have addressed the Officiating Commissioner of Assam on the subject of the Native Officials being allowed to engage in Tea and Land speculations, whilst their European superiors are prohibited from doing so, stating very truly that “there can be no argument against gentlemen of education engaging in such pursuits that would not apply with at least equal force to Natives holding appointments under them.”

3. This Association memorialized the Secretary of State for India, asking that all classes of Her Majesty's subjects should be permitted to purchase and hold lands, and although this request was not complied with, and the reasoning of the Assam Tea Planters is perfectly logical, the Committee are not prepared to ask that the anomaly should be removed by taking away the

privilege from any class of Her Majesty's subjects who now enjoy it,* but are on the contrary prepared to repeat their prayer that the restriction may be removed from the Covenanted Officers of Government whenever they see any prospect of such an appeal being successful.

4. I have on former occasions pointed out the hardship the present auction system imposed on those who had expended their time and money in exploring country and selecting lands by allowing others who had stood by to bid against them on even terms, and this hardship is no doubt greatly increased when the competition proceeds from the Establishment of the Officer who has to conduct the sale; still, so long as the system exists, the Association will not ask for any restrictions on the free competition of all *bonâ fide* buyers, but will confine themselves to proposing that the Sale Rules should be so applied as to test the *bonâ fides* of those who bid.

5. It does not appear that the Officers in Assam require any deposit to be made at the time of bidding, nor do the Rules for the Sale of Waste Lands prescribe any such step to be taken, and hence has arisen the practice (alleged to exist and complained of) of the Native Officers of the different Courts bidding up parcels of land which they do not really desire to purchase, and for which they are not the least prepared to pay.

6. I am, therefore, directed to request that His Honor the Lieutenant-Governor will give orders that in all sales of waste lands the usual condition shall be observed of requiring the party who is declared to be the purchaser to deposit immediately a certain percentage of the amount of his bid, and in default of such deposit that the lot be forthwith put up again and sold, the first purchaser being liable for any loss on the re-sale.

7. In Section 253 of Act No. VIII. of 1859, regulating the deposit to be made by the purchaser of immoveable property, the percentage to be paid down is fixed at 25 per centum, but as the Waste Land Sale Rules allow 90 per cent. of the purchase money to remain unpaid, the deposit cannot exceed 10 per cent., and this, if required to be produced in the auction room, will, it is hoped, put a stop to the biddings of those who have other objects than the purchase of the land whilst it will not deter *bonâ fide* buyers.

From R. B. CHAPMAN, Esq., Secretary to the Board of Revenue, Lower Provinces, to the Junior Secretary to the Government of Bengal,—(No. 145, dated the 15th April 1864.)

In reply to your No. 708, dated 19th February, I am directed by the Board of Revenue to submit, for the information of His Honor the Lieutenant-Governor, the accompanying report from the Commissioner of Assam, No. 192, dated 31st March, upon the subject of the purchase of waste lands by the Native Officials of the Revenue Courts in Assam.

2. The Board entirely agree with the Commissioner of Assam that it is unnecessary to issue any general prohibition against such purchases, and, with the permission of the Lieutenant-Governor, they will direct Colonel Hopkinson to withdraw the Circular instructions issued by Major Agnew. Such instructions ought not to have been issued without the Board's authority.

From LIEUTENANT-COLONEL H. HOPKINSON, Commissioner of the Assam Division, to R. B. CHAPMAN, Esq., Secretary to the Board of Revenue, Lower Provinces,—(No. 192, dated the 31st March 1864.)

I HAVE the honor to acknowledge the receipt of the papers noted in

the margin, and to reply to the Board's questions whether there has been much bidding at sales of waste land on the part of Native capitalists and agriculturists, or whether the competition is for the most part confined to European Planters; and *secondly*, whether it is the practice of Government Amlahs to bid for lots put up at sales held in the Courts to which they are attached.

Board's letter No. 18, dated the 9th February 1864, and letter from the Secretary to Landholders' and Commercial Association, received with Board's Memorandum No. 20, dated 26th February 1864.

2. In answer to the first question, I have to report that the Natives have not been large purchasers at the land sales. In Nowgong, and Luckimpore no Natives have bought lands; in Kamroop one lot only has been sold to a Native; in Durrung two lots; and in Seeksagur only have the Natives (Marwaree traders) come forward and purchased several lots. I think that though the Waste Land Rules were translated in the vernacular language and had otherwise publicity given them in Assam, their scope was not thoroughly comprehended by the Natives at first, and also that Native bidders have been, and are still deterred by the minimum area for a lot of waste lands having been fixed by the District Officers so high as one hundred acres.

3. I have addressed the Board separately on the subject of the minimum area to be fixed for lots of waste land; it is not without its difficulties, but I am inclined to think that the most equitable course is to fix the limit only with reference to administrative convenience, and that in the sequel it would be found that we had not done wisely were we to legislate to protect persons wanting large lots of land from persons wanting small lots of land, or *vice versa*. Let each take what he wants so far as we can give it to him, in the assurance that large and small capitalists are sure to come eventually to the best adjustment of their conflicting interest among themselves.

4. In reply to your second question, whether it is the practice of Government Amlahs to bid for lots put up at sales held in the Courts to which they are attached, I beg to state emphatically, that no such practice exists. I can only find two instances of anything of the kind having occurred, namely, at the Seeksagur land sale of the 2nd December last, when a Mohurir in the Treasurer's Office and a Moonsiff's Nazir each bought a lot.

5. It appears that the Landholders' and Commercial Association are not favorable to the suggestion of the Upper Assam Tea Planters' Association, that the Native Officials should be restrained from holding lands under tea cultivation, though they think the reasoning of the Tea Planters perfectly logical, that there can be no argument against gentlemen of education engaging in such pursuit which would not apply with at least equal force to Natives holding appointments under them. It seems to me, however, that an opinion in favor of Native Officials holding land, while the privilege is interdicted to their European superiors, may be held without breach of logic. The official position of the two classes

is essentially different, and the interdict is mainly founded on considerations of official position.

6. Now, however, that the question of Native Officials in Assam holding lands for the cultivation of Tea has been raised, it had better be set entirely at rest by an authoritative decision from the Government. Their interference is the more necessary because I find that the late Officiating Commissioner, Major Agnew, issued a Circular Order, copy of which is herewith appended, a few days before my return to the Province, peremptorily forbidding "each individual Amlah and Clerk, Revenue, Judicial, Fouzdary, and Educational," from engaging in Tea-planting, and while I hesitate about giving effect to this order, I am unwilling to supersede it without the sanction of superior authority.

7. Well founded objections may be made to the allowing Native Officials to hold Tea lands, abuses may spring out of their doing so, but the fact is whatever a man has a license to do may give rise to objection or abuse.

8. I beg to refer the Board to the correspondence noted in the margin. I recommended therein that no Chowdry be permitted to purchase waste lands so long as he is entrusted with the

administration of a Pergunnah, to which the Board replied that "any Officer who neglects his duties to attend to his private property will of course be liable to be displaced," but "they consider any general prohibition unnecessary." Now, most certainly, if a general prohibition is not necessary in the case of Mouzahdars, much less is it necessary in the case of the various ministerial Officers, who can be much more closely supervised by the Officers under whom they serve, and who have nothing like the scope or the opportunity for abuse that a Mouzahdar has.

9. I must insist upon it that there is room for Tea Planters of every kind and degree in Assam, and by whatever agency the actual cultivation of Tea may be extended, opportunities for the employment of English energy and English capital will increase with the extension. I may hope therefore that a day may arrive when Tea will be as strenuously and universally cultivated by the people of Assam on their own account as Rice is by the people of Arracan, and with this idea, I cannot help doubting whether the desire of the Amlah to have their Tea gardens should be restrained rather than encouraged. They have among them some of the most influential men in the Province, influential by birth, not by office merely, for the best families send their sons to our Courts, and where these lead, their countrymen will follow.

Major W. Agnew, Officiating Commissioner of Assam, to the Deputy Commissioners of the Division, Assam (No. 8, dated the 26th January 1864.)

I am quite satisfied that Native Officials can no longer be allowed, any more than their European brethren, to engage in Tea-planting or other trading operations in the District where they are employed without its leading to many abuses and that this is an absurd anomaly; moreover, to permit them to do so, I have the honor to request you will ascertain and report to me how far each individual Amlah and Clerk in your

District, Revenue, Judicial Fouzdary, and Educational, both of your own Office and those of your subordinates, is concerned in such transaction, making a note against each man's name to show whether he agrees to dis sever himself from trade or prefers being transferred to another District. You will explain to all most clearly and distinctly, if you please, that I will not be put off by a pretended disconnection, but will insist upon its being a *bond fide* one, and will see, too, that it is so by holding Deputy Commissioners responsible that no one on their Establishment evades my order by any subterfuge whatever.

From A. C. CAMPBELL, Esq., Personal Assistant to the Commissioner of Assam, to the Secretary to the Board of Revenue, Lower Provinces,--(No. 198, dated the 6th April 1864.)

In continuation of this Office letter to your address, No. 192 of the 31st ultimo, I am directed by the Commissioner to append, herewith, a very pertinent Report from the Deputy Commissioner of Seeksagur on the question of permitting Amlahs to engage in the cultivation of Tea, and to which the Commissioner solicits the Board's earnest attention.

From LIEUTENANT J. GREGORY, Officiating Deputy Commissioner of Seeksagur, to LIEUTENANT-COLONEL H. HOPKINSON, Agent, Governor General and Commissioner of the Assam Division,--(No. 909, dated the 29th March 1864.)

With reference to your Office Circulars No. 8 of the 26th January, and No. 16 of the 10th instant, I have the honor to enclose a List of the Native Officers employed in my Courts and those subordinate to me who are engaged in Tea-planting.

2. Up to this time I have experienced no inconvenience or miscarriage of justice consequent on Amlahs being engaged in the cultivation of Tea, nor do I anticipate that any such would arise generally, and it would be easy to deal with exceptional cases.

3. On the other hand it would always be difficult to prevent the Amlah from holding land and growing Tea under the names of other people.

4. The advantages of this indulgence would be that the Native Officials, who are, for the most part, men of good family, and who, in consequence of the abolition of domestic slavery and the great increase in the rates of wages, have fallen into difficulties, would have an opportunity of extricating themselves from debt and being men of influence amongst their countrymen. Their example would be likely to stir up that portion of the lower classes which would not, under any circumstances, work for European Planters.

5. European Planters already complain of the difficulty of obtaining local labour, and many in despair have ceased to rely on it and are importing largely from Lower Assam and Bengal. The Natives who would engage in Tea-planting would not be able to go to the expense of importing labour and would have to depend on local labour and would consequently direct all their energies to developing its resources, and being men of influence would be much more likely to succeed in prevailing on their countrymen to work than strangers.

List of Amlahs, &c., who engaged in the Tea plantation and trades in the District of Seeksagur.

COLLECTORY.

Prandhun Chowdry, Head Clerk.—This Officer has share of a Tea Garden with Anondo Chunder, but it has been transferred to his name.

Ghimsam Surmah, Second Writer.—Has a Tea Garden, but the trees of it have been transferred to F. J. Thornton's name.

Hemokant Surmah, Report Nuvees.—Has nothing in his own name but one Grant in that of his son and it is not cultivated too.

Boloram, Nukul Nuvees.—Has a Tea Garden in his own name.

Doorgassur Rajkhaewa, Treasurer.—Has nothing in his own name but in his son's a Grant, who is a Mouzahdar.

Bissonauth Kanongoe.—Has nothing in his own name, but his son is a partner of the Seeksagur Company.

DEWANNY.

Locknath Dutt, Head Clerk.—Has nothing in his own name but a Tea Garden in that of his younger brother.

Tangessur Borooah, Sheristadar.—Has nothing in his own name, but his son is a partner of the Seeksagur Company.

Judeebur Dutt, Mohafez.—This Officer has nothing in his own name but has a Tea Garden in his brother's name.

Siddessur Surmah Borooah, Head Mohurir.—This Officer has nothing in his own name, but his elder son is a partner of the Seeksagur Company, and the younger son is a partner of the Hohen-gapur Amlah Company.

Poornanund Bhadarkagotee, Sees Nuvees.—Has nothing in his own name, but his son has a Tea Garden.

Bulodeo Surmah, Nazir.—He has nothing in his own name, but his brother is a partner of the Seeksagur Company.

Goluck Chunder Borooah, Vukeel.—He has a small Tea Garden about two poorahs.

MOONSIFF'S COURT.

Trelockun, Nazir.—He is partner of the Seeksagur Company and purchased a Grant in the public auction.

From J. GEOFFRAN, Esq., Under-Secretary to the Government of Bengal, to the Secretary to the Board of Revenue, Lower Provinces, (No. 109T., dated the 10th May 1864.)

I AM directed to acknowledge the receipt of your letters Nos. 145 and 167, dated the 15th and 23rd ultimo, and in reply to say, that the Lieutenant-Governor entirely agrees in the opinion expressed by the Board. Major Agnew's order prohibiting Native Officials purchasing waste lands should be withdrawn. If not otherwise objectionable, it would be opposed to the orders of the Right Hon'ble the Secretary of State as expressed in paragraph 7 of his Despatch No. 22, dated the 10th August 1861, desiring that no additional restrictions should be placed on the possession of land by Uncovenanted Officers of Government.

2. The only suggestion made by the Landholders' and Commercial Association was that the first instalment of 10 per cent. should be paid at the time of sale, and that on failure to pay, the lot should be forthwith put up again. On this point, as the subject has not been noticed by the Board, I am to request that the Lieutenant-Governor may be favored with their opinion with reference not only to Assam, but to all places in which waste lands are sold under the Rules in force.

From R. B. CHAPMAN, Esq., Secretary to the Board of Revenue, Lower Provinces, to the Under-Secretary to the Government of Bengal, (No. 205, dated the 19th May 1864.)

With reference to paragraph 2 of your No. 109T., dated 10th instant, I am desired by the Board of Revenue to remind the Government that Rule 8 of the Supplementary Rules for the sale of Waste Lands, submitted for approval with the Board's No. A., dated 26th September 1862, contained the provision suggested by the Landholders' and Commercial Association, but it was struck out by the Government for the reasons stated in Government order No. 2315, dated the 9th October 1862.

2. The Board are not prepared to recommend the introduction of the amendment into the Rules at present, having seen nothing in the working of the Rules to make them consider it necessary.

From the Hon'ble A. EDEN, Secretary to the Government of Bengal, to the Secretary to the Board of Revenue, Lower Provinces, (No. 866T., dated Darjeeling, the 18th June 1864.)

In reply to your letter No. 205, dated the 19th ultimo, I am directed to say that, as the abuse which the proposal of the Landholders' and Commercial Association was designed to meet has been shown to have no real existence, it appears to the Lieutenant-Governor that there is no necessity for carrying out this suggestion by the introduction of the proposed amendment in the Supplementary Rules for the sale of Waste Lands.

From J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, to the Hon'ble A. EDEN, Secretary to the Government of Bengal, (dated the 1st July 1864.)

I AM directed to acknowledge receipt of copies of two letters from the Secretary to the Government of Bengal to the Secretary to the Board of Revenue, numbered and dated respectively No. 109T., the 10th May, and No. 866T., the 18th June, forwarded to this Association with reference to my letter of the 11th February last.

In the letter of the 18th June it is said that "the alleged abuse which the proposal of the Landholders' and Commercial Association was designed to meet has been shown to have no real existence."

The Committee direct me to say that they have always endeavoured to avoid taking up the time of Government unnecessarily; that they always exercise caution in accepting the representations

that are made to them; but they are aware that, in dealing with representations from distant Districts, they are liable to be misled or to interpret incorrectly the statements made to them.

As the letter quoted is a bare statement that the abuse brought to notice "has no real existence in fact" without any explanation or reference to the manner in which it has been so shown, the Committee cannot judge of the correctness of the conclusion come to by Government, and they think it due to themselves to explain the grounds on which the allegation was made.

The abuse complained of was that certain Native Officials of the Courts in Upper Assam had run up the price of waste lands put up to auction without intending to purchase, and without being in a position to make good the payment of the cost of the land.

This allegation was based on information received from gentlemen in Assam, and I am now directed to send copy of a letter from Mr. W. Wells to Mr. Maitland, in which the name of one Native Officer so behaving is given as well as the date of the sale and the number of the lot bid for.

Mr. Wells states that Tilli Churn, Dewannee Nazir, bid against Mr. Jenkins for Lot 28, put up to auction at Sebsagur on the 2nd December last, and that Mr. Jenkins having stopped bidding the lot was knocked down to Tilli Churn at Rupees 19 per acre.

This Mr. Wells states of his own knowledge; and he says further, on the authority of Mr. Jenkins, that Tilli Churn followed the latter to his factory, a distance of 25 miles, to entreat him to take the land off his hands, as he had not the means of paying even the first instalment.

It is further stated that, failing to move Mr. Jenkins, as the Committee understand, the Nazir got leave of absence and went off to Benares to escape the consequences of his rashness.

It appears to the Committee that the letter in question goes far to prove the abuse complained of to have "had a real existence," and in the absence of all knowledge of the evidence on which the contrary is declared by Government, they can only submit the facts in justification of the representation made in my letter of the 11th February.

It will be seen from the date of Mr. Wells' letter that it was not in the hands of the Association when my letter was written, but the facts had been vouched for, and Mr. Maitland had undertaken to get the particulars in a form that admitted of their being made use of.

From WILLIAM WELLS, Esq., to WILLIAM MAITLAND, Esq., Calcutta, (dated Khawong, the 21st February 1864.)

With reference to your remarks on the subject of the Amlah bidding for lands, you are perfectly at liberty to give both Mr. Jenkins' and my names as the authority for stating that "Tilli Churn, Dewannee Nazir, bid at the sale which was held at Sebsagur on the 2nd of December last for the extent of Rupees 19 an acre, at which Mr. Jenkins dropped him. Mr. Jenkins states that a few days after the sale this same Tilli Churn came to him at his factory to the distance of about 25 miles and entreated him, in the most abject manner, to take the land off his hands, stating positively that he was a ruined man and that he had not the means of paying even the first instalment; and what makes this particular case a great deal worse, this same man

has in a hurry taken leave and gone off to Benares, thereby being allowed by the Collector to escape from the consequences of his rashness: this fact is notorious. In short the way that the sales are conducted, particularly the last one, have disgusted every body.

With respect to the man, or rather men who called out that their bidding was for the benefit of Government, it was impossible to know who the parties were, as, instead of standing forward and making their bids properly, they screened themselves behind others standing in the crowd. Whether Lieutenant Gregory heard the people cry out about bidding for the benefit of the Government or not I can't say, but as I was sitting close to him and heard the words distinctly, the conclusion that I came to is he ought to have done so, but this will be now put a stop to no doubt. At the same time that the Debrooghur Tea Planters' Association sent the papers I wrote you about to the Landholders' Association they made a direct reference, through the Commissioner, to Government, and I now send you copies of the correspondence.

Memorandum from R. B. CHAPMAN, Esq., Secretary to the Board of Revenue, (No. 361, dated the 19th September 1864.)

Copy forwarded to Government with reference to Government Order No. 2517, dated the 14th July 1864. The Board of Revenue consider the explanation submitted to be most satisfactory, and they recommend that the papers be published.

Memorandum from COLONEL H. HOPKINSON, Commissioner of the Assam Division, (No. 67, dated the 5th September 1864.)

Copy forwarded to the Secretary to the Board of Revenue with reference to his endorsement No. 102, dated 22nd July. The undersigned at the same time begs to observe that he considers Lieutenant Gregory's explanation quite satisfactory.

From LIEUTENANT JOHN GREGORY, Assistant Commissioner, to the Personal Assistant to the Commissioner of Assam, (No. 126, dated the 16th August 1864.)

In answer to your letter No. 24 of the 4th

From Landholders' and Commercial Association, to the Secretary to the Government of Bengal, dated 1st July 1864.

From W. Wells, to W. Maitland, dated 21st February 1864.

Memorandum No. 2517, from Junior Secretary to Government of Bengal, to Board of Revenue.

Memorandum No. 102, from Board of Revenue, to Commissioner of Assam.

instant, and with reference to the correspondence noted in the margin and herewith returned, I have the honor to submit, for the information of the Commissioner, the explanation called for.

2. The statement contained in the 5th paragraph of the letter from the Landholders' Association to the Secretary to the Government of Bengal, dated the 1st July 1864, that Native Officials of the Court in Upper Assam had run up the price of waste lands put up to auction without intending to purchase and without being in a position to make good the payment of the cost of the land is incorrect; their having purchased land, and having up to this time regularly paid the instalments of the purchase money of it, and the interest on the remaining portion with as great punctuality as any of the European Planters is, I think, an

incontrovertible proof of its being so. Up to this time I have not heard of one single defaulter, and a reference to Register B. of the Waste Land Series will, I am confident, bear out my assertion.

3. Trelochurn Sorma, Nazir of the Moonsiff's Court, bought at sale of the 2nd December, Lot 28 at the rate of 19 Rupees per acre. The auction was a public one. I had received no prohibition against allowing Government employes to bid at these sales, nor did I know of any order against it, (Section XV. of Regulation II. of 1793 only applying to Revenue Amlah,) and he in every way fulfilled the conditions of the sale, so that I did not consider myself justified in preventing his competing.

4. Whether Trelochun ever offered this land to Mr. Jenkins or not I am unable to say.

5. During my absence in the interior of the District the Extra Assistant Commissioner granted Trelochun leave to accompany his friends on a pilgrimage to bathe in the Ganges, for which purpose numbers of people left the Province about that time. I was unaware, till he had started, that leave had been granted to him; but that he did not go "to escape the consequences of his rashness," as assumed by the Secretary to the Landholders' Association, is abundantly proved by his having, when due, paid into Court the first instalment of the price of his Grant and the interest on the remaining portion.

6. Adverting to Mr. Wells' letter of the 21st February 1864, it is only necessary for me to touch on the statements made in the latter paragraph, having disposed of those in the former in noticing the complaint of the Secretary of the Landholders' Association which is founded on it. With reference to the latter, it appears from its tenor to refer to some previous communication, and the charge made in it is not so clear as it would have been had the former letter been forwarded with it; but I beg to state without reservation that I took no bid without seeing the person who made it, and so careful was I (foreseeing that some reference would take place about the sale) that I caused Trelochun and another Amlah who were the principal, if not the only Native bidders at that sale, to come to the front to compete. Further, even after this lapse of time, I have no hesitation in saying that no bid was taken from, nor the price of any lot enhanced by the bidding of, any person who said "that he was bidding for the benefit of Government," nor is it reasonable to be supposed that, with the representatives of three great Tea Companies (the Assam, Jorchat, and Golaghat) present, an abuse so detrimental to the interest of their employes would have been allowed to pass without an immediate and direct appeal to my superiors.

7. There was a large concourse of European Planters at the sale, which was the first held in the District; but I heard no complaints from any of them of the manner in which it had been conducted, though many were bitter and angry at Amlahs being allowed to compete, and this bitterness was only natural when it is considered that they had come to the sale with a mutual understanding that they would not bid against one another, and that the competition of Natives was unforeseen and obliged them in many instances to pay a much higher rate than the upset price at which they had relied on getting their lots. This feeling was so strong that at a subsequent sale not only the Amlahs' bidding was objected

to, but one Planter protested against a "Marwar" trader from the bazar, who was bidding against him, being allowed to compete.

8. I am in hopes that this explanation will prove satisfactory to the Commissioner, and that he will do me the credit to believe that in the conduct of this sale I endeavoured to maintain the strictest impartiality to both European and Native bidders.

From S. C. BAYLEY, Esq., Junior Secretary to the Government of Bengal, to the Secretary, Landholders' and Commercial Association,—(No. 3894T., dated Darjeeling, the 5th October 1864.)

I AM directed to acknowledge the receipt of your letter of the 1st July last, explaining the grounds on which it was alleged that certain Native Officials of the Courts in Upper Assam had run up the price of waste lands put up to auction without intending to purchase, and without being in a position to make good the amount of their bids.

2. In reply I am to forward, for the information of the Association, the accompanying copy of a memorandum, with its annexures on the subject, from the Board of Revenue, No. 381, dated 19th ultimo.

Measures adopted for arresting the progress of Epidemic Fever.

From the HON'BLE A. EDEN, Secretary to the Government of Bengal, to the Honorary Secretary to the British Indian Association,—(No. 1487T., dated Darjeeling, the 12th July 1864.)

WITH reference to your letter of the 18th March last, I am to forward, for the information

of the Committee, a copy of the orders* issued on the Report of the Commission appointed to enquire into the causes of the Epidemic fever raging in the Districts of Hooghly, Burdwan, Naddea, Jessore, and the 24-Pergunnahs, and to say that though the Report of the Commission seems to establish the fact that miasma is the primary cause of the disease, yet other causes of a removable nature have certainly aggravated it, and not improbably imparted to it its Epidemic character.

2. The measures taken by Government, with the assistance of the public, for relieving the sick and preventing the further spread of the disease are shown to have been successful as far as they went, and to have failed only from their limited operation owing to the restricted means and agency at the disposal of the Government for the purpose. These measures will be persevered in, and the Government will be prepared to assist the inhabitants of any Town or Village, who show a disposition to help themselves, in carrying out measures of sanitary improvement and in investigating the causes of disease indicated by the Commission.

3. It will no doubt occur to the Members of the Association that the influence of Zemindars may be exerted most beneficially and most profitably to themselves in persuading the villagers to adopt habits of cleanliness and order, and to make some exertion to remove the sources of disease which lie at their very doors, and render them a prey to its ravages.

From BABOO JOTENDRO MOHUN TAGORE, Honorary Secretary to the British Indian Association, to the Hon'ble A. ENEN, Secretary to the Government of Bengal,—(dated the 26th September 1864.)

I HAVE the honor, by direction of the Committee of the British Indian Association, to acknowledge the receipt of your letter dated the 12th July last, together with a copy of the orders of His Honor the Lieutenant-Governor on the Report of the late Commission appointed to enquire into the causes of the Epidemic fever raging in the Districts of Hooghly, Burdwan, Nuddea, Jessore, and the 24-Pergunnahs.

The Committee are glad to be able to testify to the labour, research, and ability with which the Commission conducted the investigation. They observe that, in the opinion of the Commission, miasm, arising from obstructed and defective drainage, is the primary cause of the disease wherever it has in the affected Districts assumed an Epidemic character. This conclusion, they are happy to perceive, confirms the impressions which they derived from their knowledge of the country through which the Epidemic had been raging, and which they brought to the notice of Government in previous correspondence.

It may afford satisfaction to His Honor the Lieutenant-Governor to learn that the recommendations of the Commission to remove obstructions to free outlet of water, which were lately adopted in the populous Village of Dwarbaseenee, in the District of Hooghly, owned by a Member of the Association, have already been attended with the desired result, as the village, since the improvement effected in its drainage, has been for the most part exempt from the disease, whilst a neighbouring village is suffering from it.

The Committee note with satisfaction that, as a preliminary measure, His Honor has appointed a Special Engineer Officer for the purpose of taking the levels of the country affected by the Epidemic, of ascertaining how far the drainage has been intercepted by Railways and roads and other obstructions, and what measures can be taken to remove these obstructions or rectify their effects, and of submitting a general scheme for improving it wherever it is defective.

The Committee sincerely and earnestly hope that, when the Report of the Special Engineer is received, His Honor will see the propriety of speedily organizing such effective measures as he may think fit for the purpose of remedying defects of village drainage, to which the Commission so emphatically trace the germs of the fatal disease.

The Committee take leave to inform His Honor that, on receipt of the letter under acknowledgment, they caused to be written in Bengalee a brief account of the measures which the Government have adopted since the outbreak of the Epidemic was first brought to its notice by this Association, with a view to arrest the progress of the disease and to alleviate the suffering of the sick. In that Circular they have also taken occasion to impress on the inhabitants of the affected villages the importance of observing the sanitary Rules contained in the Report of the Commission, and their obligation to co-operate with the Officers of Government in promoting conservancy improvements in their respective villages. The Committee need hardly add that they will not fail to take an early opportunity to circulate extensively copies of this Bengalee address among the inhabitants of the affected Districts.

From J. GROGHEGAN, Esq., Under-Secretary to the Government of Bengal, to the Honorary Secretary, British Indian Association,—(No. 4273, dated the 17th October 1864.)

I AM directed to acknowledge with thanks the receipt of your letter dated the 26th ultimo, communicating the views and proceedings of the Association in connection with the Report of the late Epidemic Commission, and the orders passed thereon, and in reply to say that the Lieutenant-Governor anticipates the best results from the measures the Association have adopted for impressing on the inhabitants of the affected villages the importance of observing the Sanitary Rules suggested in the Report of the Commission. The improvement of the drainage of villages is obviously the duty of the Zemindar, and the Association should bring their influence to bear on the Zemindars of these villages, with a view of inducing them to undertake what is no less a palpable advantage to themselves than a positive duty to their tenants.

From J. GROGHEGAN, Esq., Under-Secretary to the Government of Bengal, to the Commissioner of the Burdwan Division,—(No. 4274, dated the 17th October 1864.)

I AM directed to forward, herewith, copy of a letter from the Honorary Secretary to the British Indian Association, dated 26th ultimo, and, with reference to the assertion that the improvements in drainage effected in the Village of Dwarbaseenee, in the District of Hooghly, have, to a great extent, exempted it from the ravages of the Epidemic fever, I am to request that you will submit a full report on the measures that were adopted, and on the amount of success which has resulted from them.

Papers regarding the practice of Swinging at the Churruck Festival.

Extract, paragraphs 8 to 12, of a Despatch from the Right Hon'ble the Secretary of State for India, to His Excellency the Governor General of India in Council, No. 2, dated the 24th February 1859.

PARA. 8.—In presenting the Petition for a Legislative enactment to suppress cruel and inhuman practices at the Churruck Poojah, the Member for the Lower Provinces of Bengal referred to an opinion of the Court of Directors to the effect that endeavours for the suppression of the cruelties of the festival should be based on the exertion of influence rather than upon any act of authority. In accordance with this view Her Majesty's Government would be disposed to leave the remedy, as suggested by the Lieutenant-Governor of Bengal, to the progress of Education and its legitimate effects were any hope held out of the discontinuance within a reasonable time of these public exhibitions of cruelty. Of this, however, there seems to be but little prospect so long as those who engage in them are left in ignorance of the light in which such exhibitions are viewed by the Government.

9. In the Presidency of Bombay the practice of hook-swinging has been suppressed by order of the Government, and (according to the reports of the District Magistrates) without any dissatisfaction on the part of the general population.

10. In the Madras Presidency the sense of Government has been marked by the insertion, as opportunity occurred, in Sunnuds for lands appropriated to the support of religious festivals, of a clause declaring that forfeiture will follow any repetition of the practice of hook-swinging, and in several parts of the Presidency the practice has entirely ceased.

11. It is in Bengal chiefly that the revolting ceremonies connected with the festival most extensively prevail, and that the efforts made to discountenance them have been attended with the least success.

12. Although the suppression of a cruel and demoralizing public spectacle is a fit subject for legislation, it is not the intention of Her Majesty's Government, in the foregoing remarks, to press upon you any immediate legislative interference in the matter. It appears to them, however, that the Lieutenant-Governor of Bengal might be instructed to take advantage of such opportunities as may occur of discountenancing the practice as far as in his power. Possibly a provision, hostile to the cruelties of the festival, may be inserted in leases of Government lands, or of lands under the management of Government Officers; the sympathies of influential landed proprietors and other members of the native community may be enlisted in the same direction; and other means, such as will often be found in the course of official administration, may also be taken of making known the views of the public Authorities in regard to such exhibitions without causing alarm as to the intentions of the Government, or producing dissatisfaction in the minds of the people. Should such measures fail to produce any perceptible diminution of the practice it will then be necessary to consider whether the Government is not called upon to take more decided steps for putting an end to observances so flagrantly opposed to the dictates of common humanity.

From E. H. LUSHINGTON, Esq., Secretary to the Government of Bengal, to the Secretary to the Government India, Home Department,—(No. 210, dated Head Quarters, the 11th January 1860.)

With reference to your letter No. 947, dated the 7th May last,

From Commissioner of Patna, No. 71, dated 17th June 1859.

From Commissioner of Bhargulpore, No. 118, dated 8th September 1859.

From Commissioner of Rajshahye, No. 533, dated 16th August 1859.

From Officiating Commissioner of Nudden, No. 25, dated 29th July 1859.

From Officiating Commissioner of Burdwan, No. 142, dated 7th July 1859.

From Officiating Commissioner of Dacca, No. 58, dated 14th August 1859.

From Officiating Commissioner of Chittagong, No. 221, dated 28th July 1859.

From Officiating Commissioner of Cuttuck, No. 59, dated 21st June 1859.

From Officiating Commissioner of Chota Nagpore, No. 214, dated 7th September 1859.

From Officiating Commissioner of Assam, No. 330, dated 11th June 1859.

From Officiating Commissioner of Arracan, No. 88, dated 30th June 1859.

From Superintendent of Darjeeling, No. 384, dated 7th June 1859.

From Superintendent of Cachar, No. 168, dated 20th June 1859.

commissioners of Divisions as noted on the margin.

2. The question of Endowments, I am directed to state, has been separately reported on in my communication No. 6998, dated the 8th ultimo.

Minute by the Lieutenant-Governor of Bengal,—(dated the 31st December 1859.)

1. In the Patna Division, and generally in the Province of Behar, it appears that Churruck Swinging is not generally practised, and that where it has happened to occur it has been owing to the presence of a large assemblage of Bengalees. There can be no difficulty in so arranging that the practice shall not recur in Behar.

2. But for this purpose I do not think an order to every Police Darogah, such as Mr. Fergusson advises, would be the most prudent method to adopt. That would be to call great attention to the prohibition where it is quite unnecessary even to mention the subject; to make people think of Churruck Swinging who have never seen it, or heard of it before; and to make a display which, perhaps, may be misunderstood, and may cause irritation, when no legitimate object is to be served by so doing. It will be enough for the Commissioner, whilst he does nothing where nothing is required to be done, to intimate quietly to those Magistrates in whose Districts there is any likelihood of a Churruck Swinging exhibition being got up, that as a measure of Police such exhibitions are not to be allowed. The Magistrates, whom he may address specially in this manner, will act in the same quiet spirit, saying and doing nothing, except when and where something is practically required to be said or done.

3. A discretion will be given to the Commissioner of Bhaugulpore to act in the same manner in regard to the Behar portion of his Division and in the Southal Districts.

4. In the Chota Nagpore Districts it would seem that what has been effected in Singbhoom by inducing the Zemindars to put an end to the practice, (for which good work Lieutenant Birl deserves great praise, which will be duly communicated to him,) may be effected in other Districts in the same manner. The Commissioner will be addressed in this sense, and I shall have an opportunity of conversing with him on the subject in the course of my tour.

5. It will be explained to these, and to the other Commissioners generally, that wherever Churruck Swinging is not a regular established custom, the refusal of the Police to allow an occasional exhibition of the sort is not unreasonable as a local measure for the preservation of order and decency. And on this ground, in such places, the disallowance may be justified, though no prohibitory law exists. But with reference to the Secretary of State's Despatch it will be quite proper, if the question is raised in such places by applications for permission to swing, or by attempts to swing unsupported by established custom, to explain fully the disapproval with which Government, supported by all intelligent and enlightened men of all classes, views this disgusting exhibition.

6. In Assam, Arracan, Darjeeling, and Cachar nothing needs to be done in the matter.

7. The Bengal and Orissa Districts remain, where the practice is common and established.

8. A copy of the letter to the Commissioner of Patna will be sent to the Bengal Commissioners to show the general view of Government on the subject, with a copy of the printed abstract of Reports for information.

9. It will be remarked to these Officers that where, as in Bengal generally, the swinging is a regular and established custom, it could not be universally prohibited by a mere Police order, unsupported by legal sanction, even if there were no other objections to such a measure, under such circumstances. But there seems good reason to believe that the practice is beginning to decrease materially, probably as the effect of some real mental progress amongst the gentry and educated classes of Bengal. If this be so, a Commissioner whose character inspires general respect, and whose influence is strengthened by a proper degree of intercourse with the leading native gentlemen of his part of the country, acting with his District Officers in the matter, may have it in his power very effectively to accelerate the general abandonment of the practice. He may have many occasions of impressing upon great Zemindars the high estimation in which Government will hold such of their number as may take such order in this matter as will have the effect of inducing the people on their lands voluntarily to give up the practice. It should always be explained that our objections to the practice do not arise from any wish to interfere needlessly with native habits, merely because they are not agreeable to our own ideas, but from a conviction, which all enlightened men, Native and European, share with us, of the vile nature of such public exhibitions of torture, even though the torture may be little more or no more than apparent.

10. Wherever the practice falls into recognized disuse, the prevention by a Police order of its revival will be easy and unobjectionable.

11. The Commissioners of Bhaugulpore and Chota Nagpore will act in this manner where the course prescribed to the Commissioner of Patna is inapplicable.

12. All Commissioners will be directed to notice the Churruck Swinging question in their Annual Reports.

13. I do not recommend that more than I have now done be done at present. I am not hopeless of a visible and rapid decay of the practice soon commencing. Indeed, some of these Reports go to show that the decay has for some time back commenced.

14. It does not appear to me that when the truth of the case is calmly considered, there is anything in Churruck Swinging *in itself* such as to demand legislative interference. It certainly involves, as actually practised, no risk of life, limb, or health. What degree of pain it inflicts on the actor may be to some extent disputed, but certainly it inflicts no severe degree of pain, because Churruck Swingers, we know, consider themselves very ill-used men, and submit formal complaints to the Authorities when prohibited

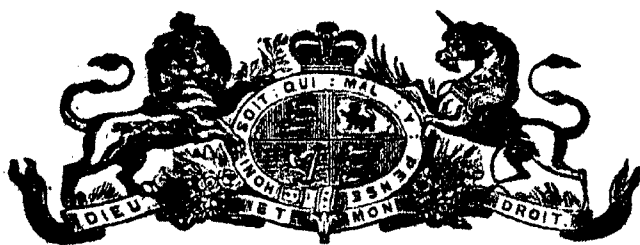
from earning two or three rupees and some sweetmeats by enduring it. *If then any set of fanatics were to inflict the same pain on themselves, or on each other, by way of religious discipline, in private, I apprehend that no legislature would interfere in the matter. It is the public spectacle that is shocking, and may be degrading. But it is so because it is an outward, and as it were triumphant sign of a most degraded state of internal religious sentiment on the part of the actors and spectators. Yet, in this, Churruck Swinging does but partake of the essential baseness of the ascetic principle, in whatever degree or manner, and in whatever part of the world it shows itself. In itself it is not nearly so bad, for example, as keeping the hand closed till the nails grow out of the back of it, a sort of self-torture which is practised, and could not be prevented by Police regulations. And where the custom of Churruck Swinging is inveterate there are none to be shocked, and probably very few capable of being degraded by the spectacle. The only reason for the prevalence of these barbarities in Bengal, Orissa, and some parts of the Madras Provinces is the prevalence, in the same places, of the lowest of the Hindoo sects or persuasions.

15. The real evil being moral, the compulsory cessation of any particular outward observance connected with it is no substantial remedy. In this view there is more of progress in the natural cessation of the practice in a single Pergunnah than in its forcible prevention throughout a whole Province. The opinions of those who believe that this real progress has commenced, and would be endangered by a measure which would not touch the real evil in India, whatever show it might make elsewhere, seem to me well worthy of consideration.

16. The President in Council will perceive that I have given orders which will bring the subject annually under notice; and I hope, by working through the leading men of the people themselves, without irritating or alarming any one, that progress may be made in the right direction, and this, if not a very showy work, will be, so far as it goes, true progress.

From R. B. CHAPMAN, Esq., Under-Secretary to the Government of India, Home Department, to E. H. LUSHINGTON, Esq., Officiating Secretary to the Government of Bengal,—(No. 332, dated the 9th February 1860.)

I AM directed to acknowledge the receipt of your letter No. 133, dated the 11th ultimo, and in reply to state that the President in Council entirely concurs in the view taken by the Hon'ble the Lieutenant-Governor on the subject of the measures to be adopted for suppressing the Churruck Poojah in the Lower Provinces.



SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, NOVEMBER 2, 1864.

OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE will henceforward be published, containing such Official Papers and Information as the Government of Bengal may deem to be of interest to the Public, and such as may usefully be made known.

Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on a payment of six Rupees per annum if delivered in Calcutta, or twelve Rupees if sent by Post.

No Official Orders or Notifications, the publication of which in the GAZETTE is required by Law, or which it has been customary to publish in the GAZETTE, will be included in the SUPPLEMENT. For such Orders and Notifications the body of the GAZETTE must be looked to as heretofore.

Depth of the Channel leading to the Port of Chittagong.

From W. GORDON YOUNG, Esq., Commissioner of the Chittagong Division, to the Secretary to the Government of Bengal,—(No. 36, dated the 28th September 1864.)

THERE being reason to believe that the Channel leading to this Port from the Sea was deeper than was generally supposed, Mr. Bamber, the Port Conservator, has lately had careful soundings taken, and from these it appears that the depth of water in the shallowest part of the Channel at low water is 16½ feet at Neap Tides, and 12 feet at Spring Tides. As it thus appears that the water has decidedly deepened since the charts now in use were prepared, I would suggest that the fact be published in the Gazette Supplement, or otherwise made known to those concerned.

2. As many inquiries have lately been made as to the trade and other matters connected with this Port, I would take the opportunity of publishing at the same time an extract from a recent note written by Mr. Bamber in reply to some questions put to us by a Calcutta Mercantile House.

EXTRACT.

"The best time for procuring rice at Chittagong is from December to February.

* Not "Paddy." * Rice * sells from 1 Rupee to 1-8 per maund, according to quality and quantity for sale.

"Salt may be sold from the ship's side or bonded.

"Salt can be bonded in Government Golahs.

"Large Ships may load, but Vessels of 8 or 4 hundred Tons are most convenient, drawing, when loaded, 17 or 18 feet of water. Vessels of larger draught went out without steam last year.

"Consolidated Port charges, 4 annas per Ton."

Papers relative to the Navigation of the Berhampooter River in continuation of those published in "Gazette" Supplement of 18th April 1863.

Memorandum from LIEUTENANT-COLONEL H. HOPKINSON, Agent, Governor General, and Commissioner of Assam,—(No. 47, dated the 28th May 1864.)

FORWARDED to the Under-Secretary to Government of Bengal with reference to correspondence noted in the margin.

From Under-Secretary to the Government of Bengal, No. 3303, dated 6th May 1863. The undersigned begs to recommend that the Establishment proposed by Lieutenant Thackeray may be entertained, and that the clearance of the portion of the river referred to may be conducted under the supervision of the Deputy Commissioner of Luckimpore.

From CAPTAIN A. K. COMBER, Deputy Commissioner of Luckimpore, to LIEUTENANT-COLONEL H. HOPKINSON, Commissioner of Assam,—(No. 4B, dated the 21st May 1864.)

In continuation of my letter No. 5 of the 19th January last, I have the honor to forward an Estimate of the probable cost of keeping clear the navigation of the Berhampooter River above and below Suddya.

UPPER ASSAM DIVISION.

PUBLIC IMPROVEMENT DEPARTMENT.

No. 5 of 1864-65.

Estimate by Lieutenant Thackeray, R. E., of the probable expense of maintaining an Establishment to keep clear the navigation of the Berhampooter above and below Suddya.

REFERENCES.—Letter No. 14, dated 23rd October 1863, from the Personal Assistant to the Commissioner of Assam, to the Deputy Commissioner of Luckimpore.

REFERENCES.—Letter No. 14. of the 6th May 1864, from the Personal Assistant to the

Commissioner of Assam, to the Deputy Commissioner of Luchimpore.

REPORT.—Steamers drawing less than five feet of water and provided with Pilots well acquainted with the river may ascend the Berhampooter as far as Pobah at all times of the year unless the water in the river is unusually low; but above the junctions of the Dehong and Berhampooter Rivers the navigation for four or five months of the year would be impeded by shifting sand banks which change their position, and which could not be removed without great labour and expenditure.

2. There are also several large snags near Suddya, one nearly opposite to the Station, which on the 20th January last, when the river was almost at its lowest tide, scarcely protended from the water.

3. Another large one is about half way between Saikwah and Suddya, one opposite Saikwah, two at the junction of the Berhampooter and Dehong River, and two large ones opposite Pobah. These are the most formidable snags and can be removed by carpenters and coolies.

4. In January last there were also several smaller snags between Suddya and the junction of the Dehong and Berhampooter Rivers, but these on the 7th of this month were not visible, and for seven or eight months would not impede the navigation of the river.

5. Large trees are washed down the river during the rains of each year, thus forming new impediments, while the old snags are washed away or change their position, so that an exact estimate cannot be prepared for the complete removal of all impediments, and the best way seems to be to maintain an Establishment for five months during the cold weather. The men thus entertained would remain on the river, and would remove the snags, so as to keep the river clear for eight or nine months, during which time it would be navigable for Steamers above Pobah. The first snags to be removed would be those at the junction of the Dehong and Berhampooter Rivers.

6. The superintendence of the other works in this large Division has taken up all my time, and I have been unable as yet to examine the river above Suddya; but Serjeant McCarthy, an Assistant Overseer in this Division, reports that by removing a few snags the river would be made navigable for Steamers for six months of the year as far as the Nos Dehing.

Extract of Expenditure.

	Rs.
6 Dooms, at Rupees 7 each per month, for five months	210
2 Carpenters, at Rupees 12 each per month, for five months	120
2 Carpenters, at Rupees 8 each per month, for five months	80
8 Coolies, at Rupees 7 each per month, for five months	280
Ropes and Contingencies for five months	30
Total Annual Expenditure, Rupees	720
Purchase of two good Boats of 100 maunds tonnage, at Rupees 100 each	200

E. T. THACKERAY, *Lieut., R. E.,*
Exc. Engr., Upper Assam.

DEBROOGHUR,
The 19th May 1864. }

From the Hon'ble A. EDEN, Secretary to the Government of Bengal, to the Agent, Governor General, and Commissioner of Assam,—(No. 839T., dated Darjeeling, the 17th June 1864.)

With reference to your Office Memorandum No. 47, dated the 28th ultimo, I am directed to

6 Dooms, at Rupees 7 each per month, for five months	Rs.	210
2 Carpenters, at Rupees 12 each per month, for five months	"	120
2 Carpenters, at Rupees 8 each per month, for five months	"	80
8 Coolies, at Rupees 7 each per month, for five months	"	280
Ropes and contingencies for five months	"	30
	Rupees	720
2 Boats, at Rupees 100 each	"	200
Total Rupees		920

inform you that the Lieutenant-Governor is pleased to sanction the Establishment proposed by Lieutenant Thackeray, R. E., Executive Engineer, Upper Assam, for keeping clear the navigation of the Berhampooter above and below Suddya as detailed in the

margin, the work to be conducted under the supervision of the Deputy Commissioner of Luchimpore.

2. The Lieutenant-Governor also sanctions the purchase of two Boats for the purpose at Rupees 100 each.

Papers regarding the Rule to be observed by Steamers meeting or passing Vessels at anchor in the River Hooghly.

From CAPTAIN H. HOWE, Deputy Master Attendant in charge, to the Secretary to the Government of Bengal,—(No. 2284, dated the 27th September 1864.)

With reference to my letter No. 2150 of the 13th instant, I have the honor to submit a further communication on the subject of the Rule of the road in the Hooghly.

2. The necessity for this has arisen from the repeated declarations of Pilots of standing and experience that there is no Rule applicable to the case of a Steamer meeting or passing a Vessel at anchor, this statement having now again been made before a Committee of Enquiry by two Branch Pilots, showing the necessity of prompt dealing with mistaken views of so mischievous a tendency.

3. I have accordingly issued a Memorandum to the Pilot Service on the subject, copy of which is submitted for the Lieutenant-Governor's information, in order that this phase of the question may come under His Honor's consideration, together with that already before him.

4. The occasion for this Memorandum is set forth at length in the document itself, and I need not unnecessarily take up His Honor's time by repeating what will be read therein, neither is it necessary to trouble His Honor with the proceedings of the Committee of Enquiry in this case, as I am not prepared to recommend any punishment to be inflicted on the Pilot of the *Calamit*, a young Licensed Pilot, for a want of judgment and an ignorance of the applicability of the law in which he is supported by so many Officers of long standing and experience. But after what I trust will be considered a clear exposition of the bearing and meaning of the law, I should be disposed to visit any future wilful breach of it very severely.

5. I believe that the present want of appreciation of the meaning of the law is the two Rules in which it is laid down being printed in one in our Pilot's Code, which has led Pilots to entertain the idea that the Rule is intended only for Steamers and sailing Vessels *meeting*, overlooking the second part of the Rule which provides for Steamers navigating rivers under *other* circumstances.

6. An extract of the Merchant Shipping Act showing the Rules quoted in my Memorandum is annexed, as also extract of the Rule 48 in our Pilot Code.

7. The passages from the Shipping Act which I have underlined in my Memorandum, abundantly support, I submit, the views I have propounded to the Service, and I trust His Honor will approve of them.

Memorandum by CAPTAIN H. HOWE, Deputy Master Attendant in charge,—(No. 2266, dated the 26th September 1864.)

— In the case of the collision between the Ships *Calomet* and *Nouvelle Ascension* on the 15th September, which has been made the subject of enquiry before a Committee, it appears by the evidence that the *Nouvelle Ascension* was at anchor in the channel off Moneckolly Point, with sufficient room for Ships to pass on either side.

2. The *Calomet* in tow of the *Dwarkanauth* passing up at top of high water attempted to pass the *Nouvelle Ascension* on the port side; the head of the *Nouvelle Ascension* being up the river, bearing about N. by W. nearly on a line with the *Calomet's* course.

3. On approaching the *Nouvelle Ascension*, the *Calomet* and her Tug began to sheer about a great deal, and at length the *Calomet* ran into the *Nouvelle Ascension*, doing considerable damage.

4. The Committee find that the accident was caused by the strong eddies, and that there is no blame attributable to the Pilots of the respective Vessels; but after re-assembling, under direction, to take further evidence, in the course of which two Branch Pilots of experience stated that they knew of no Rule compelling Vessels to pass Vessels at anchor on any particular side, the President recorded a Minute to the effect that in his opinion a Vessel towed by steam should be bound by the Rules of the road applicable to Steam Vessels, consequently the Pilot of the *Calomet* should have directed the Commander of the Steamer *Dwarkanauth* to keep on the starboard side of the channel, as from the fact of two Vessels having passed the *Nouvelle Ascension* on that side previous to the collision, there must have been ample room for the *Calomet*, with the assistance of the Steamer, to have passed also.

5. In this opinion the Deputy Master Attendant entirely concurs, and considers that the *Calomet* was endeavouring to pass on the wrong side of the channel.

6. On the question of the Rule, which is ignored by many Officers, the Deputy Master Attendant in charge feels bound, in the face of the collisions which are becoming of such frequent occurrence, to call the special attention of the Officers of the Pilot Service to the fact that there is a Rule, and a very stringent one. It is not likely that the Legislature would have left us without a Rule applicable to all occasions of Steamers navigating rivers and narrow channels.

7. It will be found, then, that the Rule No. 48 in the book of Rules for the guidance of Running Pilots is, on this point, of a two-fold nature; the first part relates to Steamers *meeting*; and the second part distinctly provides that every Steam Vessel navigating any river shall keep, as far as practicable, to the side of the fairway or mid-channel which lies on the starboard side of such Vessel.

8. In the Merchant Shipping Act of 1854, 17 and 18 V. C. 104, these are two distinct Rules, Nos. 296 and 297; in our Pilot Rules they form one paragraph, but are divided into two Rules by a full stop.

9. The second Rule, then, or No. 297 of the Act, meets the cases of Steamers navigating a river under every possible contingency (unless some obstacle be in the way) which is not provided for by Rule No. 296 of the Act, or the first part of the Rule in our Pilot's Code.

10. Steamers *meeting* are to pass on the port side of each other; and a Steamer navigating a river is to keep, whenever safe and practicable, on that side of the channel which lies on the starboard side of such Steamer.

11. An observance of this Rule, whenever it is practicable, will obviate all doubts as to which side of a Ship at anchor a Steamer is to pass, and Pilots are warned of the responsibility they incur by non-observance of the Rule; the

Sections 296 and 299.

Act providing that if in case of collision it appears that such was caused by the non-observance of any Rule for the exhibition of lights, &c., or of the foregoing Rule as to the passing of steam and sailing Ships, or of the foregoing Rule as to a Steamship keeping to that side of a narrow channel which lies on the starboard side, the owner of the Ship by which such Rule has been infringed is not entitled to recover any recompense whatever for any damage sustained by such Ship in such collision, unless it is shown to the satisfaction of the Court that the circumstances of the case made a departure from the Rule necessary; and any damage arising from the non-observance of any of the said Rules is to be deemed to have been occasioned by the wilful default of the person in charge of the deck at the time, unless it is satisfactorily shown that the circumstances of the case made a departure from the Rule necessary.

12. The *Calomet* was not observing this Rule, and there was no obstacle in her way; had she done so, there is every probability that she would have gone clear.

Extract from Rules for the guidance of Running Pilots.

STEAMERS *meeting* are to pass each other on the port side. Steamers, with or without Ships in tow, likely to meet in a narrow passage, or when, from another Vessel being in the way, it may be difficult to pass, the one going against tide is to ease her steam until the other has cleared the difficulty. Every Steam Vessel navigating any river or narrow channel shall keep, as far as practicable, to that side of the fairway or mid-channel of such river or channel which lies on the starboard side of such Vessel, due regard being had to the tide and to the position of each Vessel in such tide. Steam Vessels under weigh are to be considered in the light of Sailing Vessels navigating with a fair wind, and are to give way to Sailing Vessels on a wind on either tack.

EXTRACT, MERCHANT SHIPPING ACT, 1854.

Safety and Prevention of Accidents.

Lights and Fog Signals and Meeting and Passing.

WHENEVER any Ship, whether a Steam or Sailing Ship, proceeding in one direction, meets another Ship, whether a Steam or Sailing Ship, proceeding in another direction, so that, if both Ships were to continue their respective courses, they would pass so near as to involve any risk of a collision, the helms of both Ships must be put to port, so as to pass on the port side of each other; and this Rule must be obeyed by all Steam-ships and by all sailing Ships, whether on the port or starboard tack, and whether close-hauled or not, unless the circumstances of the case are such as to render a departure from the Rule necessary in order to avoid immediate danger, and subject also to the provision that due regard must be had to the dangers of navigation, and as regards Sailing Ships on the starboard tack close-hauled to the keeping such Ships under command.—§ 296.

Every Steam-ship when navigating any narrow channel must, whenever it is safe and practicable, keep to that side of the fairway or mid-channel which lies on the starboard side of such Steam-ship.—§ 297.

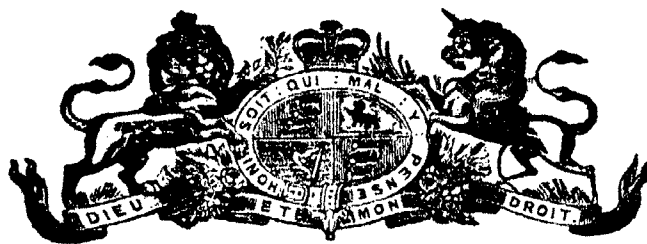
If in any case of collision it appears to the Court before which the case is tried that such collision was occasioned by the non-observance of any Rule for the exhibition of lights, or

the use of fog signals, issued in pursuance of the powers hereinbefore contained, or of the foregoing Rule as to the passing of Steam and Sailing Ships, or of the foregoing Rule as to a Steam-ship keeping to that side of a narrow channel which lies on the starboard side, the owner of the Ship by which such Rule has been infringed is not entitled to recover any recompence whatever for any damage sustained by such Ship in such collision, unless it is shown to the satisfaction of the Court that the circumstances of the case made a departure from the Rule necessary.—§ 298.

In case any damage to person or property arises from the non-observance by any Ship of any of the said Rules, such damage is to be deemed to have been occasioned by the wilful default of the person in charge of the deck of such Ship at the time, unless it is shown to the satisfaction of the Court that the circumstances of the case made a departure from the Rule necessary.—§ 299.

From S. C. BAYLEY, Esq., Junior Secretary to the Government of Bengal, to the Deputy Master Attendant in charge,—(No. 4174, dated the 25th October 1864.)

I AM directed to acknowledge the receipt of your letter No. 2284, dated the 27th ultimo, with its accompanying Memorandum, and in reply to inform you that the Lieutenant-Governor approves of your interpretation of the law regarding the Rule to be followed in the River Hooghly in a case in which a Steamer meets or passes a Vessel at anchor.



SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, NOVEMBER 9, 1864.

OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE will henceforward be published, containing such Official Papers and Information as the Government of Bengal may deem to be of interest to the Public, and such as may usefully be made known.

Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on a payment of six Rupees per annum if delivered in Calcutta, or twelve Rupees if sent by Post.

No Official Orders or Notifications, the publication of which in the GAZETTE is required by Law, or which it has been customary to publish in the GAZETTE, will be included in the SUPPLEMENT. For such Orders and Notifications the body of the GAZETTE must be looked to us heretofore.

Agricultural Show in the Nuddea Division.

From H. L. DAMPIER, Esq., Commissioner of the Nuddea Division, to the Secretary to the Government of Bengal,—
(No. 214, dated the 17th October 1864.)

As required in Government order No. 3593, dated 23rd August 1864, I have the honor to report the arrangements which I have made for holding an Agricultural Exhibition in this Division.

2. I have received demi-officially permission to include simple Agricultural implements in the Exhibition.

3. His Honor the Lieutenant-Governor having ordered that the Divisional Committee should manage the arrangements of the Show itself, it was necessary that the residents of Kishnaghur (at which I have determined to hold the Exhibition) should be strongly represented on the Divisional Committee, as the details of the Show Yard must be in their hands; at the same time it was necessary to have on the Committee Members representing the interests of the 24-Pergunnahs and Jessore. It was impracticable to bring these two necessary elements together at meetings, I therefore adopted the expedient of a Divisional Committee in two sections; the one sitting at Kishnaghur, the other in Calcutta.

4. The Kishnaghur section of the Divisional Committee consists of residents of the Station, who will, I hope, take a personal interest in the local arrangements. The Nuddea District Committee consists mainly of residents in the interior of the District.

5. In forming the Calcutta section of the Divisional Committee it was my object to secure the co-operation of the representations of the principal landed interests in the Division.

The following gentlemen have kindly consented to act with me :—

The Hon'ble Claude H. Brown, representing Messrs Jardine, Skinner and Company's and Watson and Company's Indigo and Zemindarree interest.

George Bright, Esq., Collector of 24-Pergunnahs.

E. W. Molony, Esq., Collector of Jessore.

A. M. Dowleams, Esq., representing experience in Exhibitions, &c.

J. Beckwith, Esq., representing the Landholders' Association.

R. Dodd, Esq., representing Messrs. Thomas and Company's Indigo and landed interest.

Hugh Fraser, Esq., representing Soonderbun Grantees and Member of the Landholders' Association.

Bajah Burdakanth Roy ... } Jessore Zemindars.
Baboo Hurnath Roy ... }

Rajah Shuttoshurun Ghosal } Zemindars of the
Baboo Diggumbar Mitter... } 24-Pergunnahs
Moonshee Buzlool Ruheem } and Members of
the British Indian
Association.

Edward Grey, Esq., Collector of Nuddea ... } Joint Secretaries
W. L. Heeley, Esq., c. s. ... } to the Divisional
Committee.

6. Moharajah Satties Chunder Roy, of Nuddea, and Rajah Pertab Chunder Singh, who is a great Landholder in Jessore, have not yet replied to my address; perhaps they are absent.

7. I have addressed the Landholders' Association, the British Indian Association, and the Agricultural Society asking for their co-operation and the exertion of their influence in support of the Exhibition.

8. On the 18th September I met a Committee which had been constituted at Kishnaghur before the receipt of the orders of Government for the purpose of holding a District Exhibition. They had already raised subscriptions to the amount of

1,500 Rupees. At that meeting I constituted the Kishnagur section of the Divisional Committee, who undertook to draw up Prize Lists and Rules. I then returned to Calcutta and organized the Calcutta section of the Divisional Committee.

9. As soon as I received the Rules and Prize Lists from Kishnagur I called a meeting of the Calcutta section, which was held on Saturday, the 1st of October, at the Town Hall.

10. The Notification and Rules referred to in the 12th Resolution have appeared in the *Government Gazette* of the 5th and 12th instant.

11. I have called on the District Committees to exert themselves in obtaining the assistance and support of the residents of their Districts; and the Members of the Calcutta section of the Divisional Committee have engaged to address their constituents and tenants to the same effect.

12. Such questions as whether we can manage to feed the Live Stock during the Show, the rate of admission fees, &c., are reserved for decision until we have some idea of the resources which will be at our disposal, and of the number of Live Stock which are likely to be exhibited.

13. I hope that these arrangements will meet with the approval of His Honor the Lieutenant-Governor.

P. S.—I have now reason to believe that the 28th of December will be too early a date for a Show of the principal crops of the Division, if so, the Exhibition can easily be put off. Enquiries are being made. The gale is another reason which makes it impossible to hold the Exhibition so early.

From S. C. BAYLEY, Esq., Junior Secretary to the Government of Bengal, to the Commissioner of the Nuddea Division,—(No. 4485, dated the 25th October 1864.)

In reply to your letter No. 214, dated the 17th instant, I am directed to inform you that the Lieutenant-Governor approves of your proceedings in connection with the Agricultural Exhibition of the Nuddea Division for the current year.

2. Adverting to the remarks made in the Post Script of your letter under reply, I am directed to observe that the date of the Exhibition should be fixed so as to meet to the utmost the convenience of the Public.

Note on the progress of the Cyclone of the 5th October 1864.

From LIEUTENANT-COLONEL J. P. BEADLE, R. B., Chief Engineer, Bengal, to the Secretary to the Government of Bengal,—(No. 1925, dated the 25th October 1864.)

I HAVE the honor to submit the accompanying Note of the progress of the late Hurricane, including some extracts and remarks on the subject generally, which may perhaps serve as a preliminary to the detailed statements of its action on the Public Works, and of the damages done, and probable loss sustained, which have to be submitted.

2. A complete scientific investigation of the hurricane is under preparation in another quarter, so I have neither delayed this document, nor given sufficient time to its preparation to make it in any way such a paper as would supersede the necessity for a complete analysis of the Cyclone.

Note of the progress of the late Hurricane.

THE Hurricane we have recently experienced confirms remarkably Maury's concise description of the theory of the Cyclone as a rotary Storm, which is nearly as follows:—

Revolving (in the Northern Hemisphere) against the hands of a watch; the greatest violence near the centre or vortex of the Storm; the vortex itself a calm, which travels sometimes one or two miles an hour, and sometimes forty or fifty; the barometer low in the centre, rising at the outside edge, or periphery; the diameter sometimes a thousand miles, and sometimes not more than a few leagues; the origin somewhere between the parallels of 10° and 20° north and south of the Equator, travelling to the westward inclining towards the nearest pole until they reach the parallel of 25° or 30°, when they turn towards the east or "recurvate," but continue to increase their distance from the Equator.

Maury does not wholly accept this theory; he thinks that the wind in a true cyclone blows in spirals towards the vortex, which is the theory held by Thom, who was the Piddington of the Mauritius.

There are three theories,—

I.—*The wind blows round and round the vortex, or place of low barometer, which is as a disc to the rotary storm.*

II.—*The wind blows directly towards the vortex, which is like an oblong trough between two atmospheric waves.*

III.—*The wind blows in spirals towards the vortex, gyrating only within a certain distance of the vortex, the gyrating column being of comparatively small diameter.*

Maury inclines to the belief that cyclones are whirlwinds within a storm; that on the sea, as on land, there may be a storm within a storm, that is, a cyclone travelling with the storm and revolving within it. He lays down also that we are not entitled to call the movement of the wind a cyclone unless the wind shifts more than 180 degrees.

Piddington, writing on the hurricane in the Bay of Bengal on the 3rd, 4th, and 5th of June 1839, says:—"Colonel Reid and Mr. Redfield give from 10 to 30 miles an hour for the rates at which the centres of their different vortices have probably travelled onwards." "It appears that from the 3rd to the 4th the hurricane travelled onwards only about 100 miles, or say 4½ miles an hour, and from the 4th to the 5th about 7 to 8 miles an hour."

"The slow rate at which our vortices travel onwards is very remarkable."

Mr. Piddington, in the same pamphlet, says that we do not yet know what is the usual track of our Indian hurricanes. Judging from this single tempest, he thinks that in the absence of better knowledge it may be assumed that the hurricanes in the Bay of Bengal travel from the eastward to the westward; and he quotes from a review of Colonel Reid's *Work on Storms* by the Hon'ble Company's Astronomer at Madras "that the East India gales appear invariably to travel from the Coast of Arracan towards the west; the curves conforming gradually to the shape of the shore." The recent cyclone had this course, but inclined very soon to the northward.

At False Point, on the Cuttack Coast, the wind Superintendent, Light House, False Point. commenced at 9 A. M. of the 4th October from the north-east, getting

round at 4 p. m. to north north-east with heavy showers of rain; at midnight it veered to north-west, blowing twice as hard. At 1 a. m. it blew from the west, and at 3 a. m. of the 5th it began to moderate; *the tide rose 5 feet higher than the highest spring tide.*

The barometer at no period indicated a gale, as it never fell lower than 29.40; some trees were blown down, considerable destruction was caused to the embankments, and one sluice was washed away. The gale was not felt at the Station of Cuttack, nor was it experienced in the slightest degree at the Chilka Lake. This gale has some of the characteristics of a cyclone, and, if the statement be correct, deserves to be further considered as to the connection it may have had with the hurricane.

Balasore.—Balasore was visited by a severe gale between 11 p. m. of the 4th and 5 a. m. of the 5th.

The barometer fell half an inch during the gale and rose $\frac{1}{10}$ after it abated.

There was one continued roar and rush of wind and rain with occasional tremendous gusts.

The wind came from north and west veering towards west.

The rain ceased at 9 a. m., but the wind did not fairly abate till about 4 p. m. of the 5th.

The thermometer during the gale stood from 76° to 72°. But little damage has been done to the buildings in the Station. Trees suffered most, many along the Cuttack and the Station roads were blown down and the roots turned up; almost every clump of bamboo in the place has been torn up by the roots.

Hidgellee.—At Contai the barometer fell from 29.75 on the evening of the 4th to 28.025 during the lull between 10 and 11 a. m. of the 5th, showing that the vortex of the hurricane passed over Contai. The Executive Engineer's note is as follows:—

"The storm commenced about 4 o'clock a. m. of the 5th, and lasted till about $\frac{1}{2}$ to 10 o'clock; it was at its highest about $\frac{1}{2}$ to 9. From about 8 o'clock to the lull the barometer fell from 28.95 to 28.025. On the evening of the 4th the barometer was at 29.75. After a complete lull of nearly an hour the gale came back, the barometer remaining steadily at 28.025 in the interim. At 12 o'clock the barometer went up to 28.125; for nearly an hour the gale was more like a whirlwind than any thing else. At $\frac{1}{2}$ past 12 the barometer was at 28.53. At $\frac{1}{2}$ to 1, 29.025. At $\frac{1}{2}$ past 1, 29.10. At 2 o'clock 29.40, and at this time the gale had subsided."

In this report we have proof of the position of the vortex, and also, I think, of its length; the outside storm of the hurricane did not extend far inland; and Kedgerree, although later, was circumstanced very much as Contai was, with this difference, that Contai is about 5 miles inland and 4 miles within the embankments, which are 20 feet high; but Kedgerree is outside the main embankment, and on the shore of the Hooghly. The reports from Hidgellee are not complete, but the height of the cyclone wave which swept Sangor Island has been carefully measured, and is reported to have been 15 feet above the land level.

Of the cyclone of May 1833 Mr. Bond, the Master Attendant of Balasore, writes (July 31st 1839:—

"Gales at Kedgerree, though blowing dead to windward of us distant 75 miles, do not always reach this coast, as in the May hurricane of 1833, when the *Duke of York* was blown from her moorings at Sangor across to Hidgellee and became a wreck, yet the gale did not reach here, although the bank to the eastward in the heavens so plainly indicated a gale that every person here barred up their doors and nailed them. We only had a good top-gallant breeze."

In the present instance we have the *Bentinck* landed on the shore at Diamond Harbour.

The *Alexandra* Steam Tug was anchored off Sangor, but got loose, and with steam up passed through the vortex, having a calm for three quarters of an hour, much about the same period that the lull lasted at Contai, but *one hour later*, from which it would seem that at 10 a. m. of the 5th she was between Contai and Kedgerree, probably in the Coweolly roads. When the hurricane resumed from the north-west, she kept her head north and east and steamed her best, but drifted south and west till she anchored off Piplee Sands below Hidgellee.

The Ship *Clarence*, which was about 2 degrees south and east of Juggernaut at 10 a. m. on the 4th October, had the wind blowing strong from the north-east, and was on the north-west verge of the cyclone, travelling north, so she sailed on its south-eastern edge perfectly safe. The distance between the *Clarence* at 10 a. m. of the 4th and the *Alexandra* at 10 a. m. of the 5th is about 260 miles, so the hurricane must have travelled about 10 miles an hour up to Hidgellee.

This evidence, together with that obtained from the fact of the *Burmah* not feeling the hurricane, whilst the *Proserpine* Steamer, which sailed a few hours later and followed in the same tract, but slower, suffered severely on the north-east side of it, would seem to show that the cyclone had its origin at some point at sea about 100 miles from the Arracan Coast in the latitude of Kyauk Phyo, (about 19° north) and that it travelled nearly due west till it came into longitude 89°, where it took a northward turn and set upon Hidgellee, driving its course along the right bank of the Hooghly River, crossing the Roopnarain River from Tumlook to Koda Ghat and the Hooghly above Calcutta so as to pass to the east of Kishnaghur, crossing the Ganges between Rampore Beaulah and Pubna, and then over Nattore, sweeping Bograh with great violence; after which, having reached latitude 25° north, it took a decided bend, or as it is called "re-curvature," towards the Garrow Hills, and it began to expend.

It is a mistake to suppose that the cyclone reached Gowalparah in Assam. The late Executive Engineer of the Lower Assam Division left Gowahatty on the 7th October, and the first place at which they heard of, or saw the effects of the hurricane was at Serajgunge, on the Brahmaputra.

The cyclone had a width of about 100 miles.

Mr. J. P. Grant, who was stopped at the crossing of the Roopnarain river, (Midnapore road,) about 16 miles from Oolobariyah, has carefully described the cyclone,—wind, wave, and calm.—At 2½ p. m. it became a perfect calm, which lasted for nearly an hour, two hours previously (12½ a. m.) the cyclone wave had risen to within two or three feet of the crest of the embankments. This fixes

another point in the track of the vortex and shows that the cyclone pushed forward and was preceded by the wave.

The vortex travelled from Contai to Koila Ghat, a distance of 48 miles, in $5\frac{1}{2}$ hours, being at a rate of nearly 10 miles an hour. A third point at which a decided calm of some duration was experienced is at Beernuggur, east of Kishnaghur, on the road to the Eastern Bengal Railway. *The storm at Beernuggur lulled about 8 p. m. of the 5th October, remaining comparatively calm for about half an hour, when it set in again from the opposite quarter, but with less violence, and attained its maximum again at 9 $\frac{1}{2}$ p. m., ceasing at about 2 a. m. of the 6th October.*

The distance from Koila Ghat of 82 miles was thus passed in $5\frac{1}{2}$ hours, giving a rate of 15 miles an hour for the onward path of the vortex. A fourth point is Nattore, Trans-Ganges; here a lull of one hour commenced at 11 p. m. on the 5th, which gives a further course of 80 miles in three hours, or a velocity of 26 miles an hour.

At Koila Ghat, as at Contai, the hurricane was a whirlwind; and at its worst directly after the lull, and with the wind from south-west.

Piddington describes the "storm wave" as "*a mass of water of the same diameter nearly as the cyclone, raised by diminished atmospheric pressure and other causes, driven bodily along with the storm, or before it; and when it reaches bays or river mouths or other confined situations, causing by its further rise, when contracting, dreadful inundations; but upon open coasts rarely so, or not in so great a degree, as it can there spread out quickly and find its level.*"

Maury says that in the middle of the cyclone there is generally rain, or hail, or snow, and that there is an immense amount of heat set free; he attributes "*the diminished barometric pressure, first, on account of centrifugal tendency; next, on account of the ascending column of air, which expands and ascends, ascends and expands on account of such diminished pressure; and next, though not least, on account of the heat which is set free by the condensation of the vapour which forms the clouds and makes the rain. This heat expands and pushes aside the upper air still more.*"

A glance at the Map suffices to show what the effect must be above "the wide opening from Point Palmyras to Chittagong, which, to use an Orientalism, is the gate to the plains of Bengal" of an extensive sea surface raised above the general level and driven forward upon one of the main channels leading inland from that gate.

In the present case the wave precipitated upon the low lands at the mouth of the Hooghly river, to the great destruction of life, was fifteen feet high; and it is for consideration how far Saugor Island and other low tracts similarly circumstanced should be inhabited.

It is also for consideration how far such low lands which afford the only means for decreasing the force and volume of the waters raised by a hurricane and driven up the Hooghly should be protected from the inroads of a cyclone wave.

This Note will be followed by detailed statements of the damages sustained by embankments, roads, and buildings, showing the damage done to each class of work.

Generally, it may be said that the Public Works have stood well. The characteristic of this hurricane has been the extensive destruction of trees. Masonry buildings, which were in a fairly sound state, have stood well, and where they

e. g., The new third story to Charles Nephews, Calcutta.

suffered damage, it has been owing to the insufficient fastenings of

the doors and windows: new masonry stood well. It seems that stronger fastenings on land as well as stronger hatches at sea are required. Piddington always pointed out the danger of weak hatches. May not the following extract explain the way in which the unfortunate *Persia*, which seems to have been "taken aback," went down?

"A vessel may, in one of the terrific gusts which accompany these sudden shifts of wind, be thrown on her broadside in the trough of the sea with her deck towards the sea! In such a case she is in the position of a vessel on a reef which has fallen over to seawards, and there is every chance that her hatches would be beaten in, which would swamp her."

The iron Light House on Saugor Island, which has no foundations below the land level, stood the shock of the cyclone perfectly well. Cowcolly Light House also, which is a brick masonry column below Kedgerree, has not been injured; the wave over the land has been measured and was 13 $\frac{1}{2}$ feet. The masonry buildings both at Contai and at Kedgerree have stood well.

The Sea Dyke of Hidgellie has been breached in six places, all of which are in the portion fronting Contai, and but nothing has been said about the masonry sluices, which is a good sign; the lands of Hidgellie have not suffered to the extent to which they suffered in 1832-33; where the embankments have stood, but were ridden over by the wave, the crest for some lengths has been torn out, leaving a gaping hollow; but the seat of the embankment, which is the mass of the earth-work, remains; it is only in very few places that the whole section has been washed away.

On the Hooghly face of the 24-Pergunnahs and on the Roopnarain river in Mundleghat the greatest damage appears to have been sustained. The wide basin of the Roopnarain drew off a large proportion of the wave in the Hooghly to the relief of the upper sections and of Calcutta; the embankments were overtopped from 3 to 4 feet and destroyed in many lengths; the sluices in the embankment on the Hooghly river-face, fronting the James and Mary, have been destroyed.

The embankments of Mundleghat on the Damoodur have not suffered much.

The chief expense of repairs to embankments will have to be incurred on the 24-Pergunnah side of the Hooghly, which was inundated by the raised waters passing over the embankments, which, from Saugor Island to Diamond Harbour, were about 8 feet high. Above Hooghly Point the wave in the river rapidly diminished, but it reached to 23 $\frac{1}{2}$ feet over the sill of the Kidderpore Dock at 3-45 p. m., which is about 5 feet above high tide level of the 5th October, as it should ordinarily have been at 4-21 p. m.

J. P. BEADLE, *Lieut.-Col., R. E.,*
Chief Engineer, Bengal.

The 25th October 1864.



SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, NOVEMBER 30, 1864.

OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE will henceforward be published, containing such Official Papers and Information as the Government of Bengal may deem to be of interest to the Public, and such as may usefully be made known.

Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on a payment of six Rupees per annum if delivered in Calcutta, or twelve Rupees if sent by Post.

No Official Orders or Notifications, the publication of which in the GAZETTE is required by Law, or which it has been customary to publish in the GAZETTE, will be included in the SUPPLEMENT. For such Orders and Notifications the body of the GAZETTE must be looked to as heretofore.

Postponement of the Kishnaghur Agricultural Exhibition.

From H. L. DAMPIER, Esq., Commissioner of the Nuddea Division, to the Secretary to the Government of Bengal,—(No. 238, dated the 5th November 1864.)

IN continuation of my No. 214, dated 17th ultimo, I have the honor to state that it has been represented to me from all quarters that, in consequence of the disastrous effects of the Cyclone in this Division, there is no chance of an Agricultural Exhibition meeting with support or success if held at Kishnaghur this season.

2. Planters, Zemindars, Mahajuns, and Ryots have alike suffered severe losses, and their whole attention and interest will be engrossed in this direction for some time. I am convinced that it would be impracticable, if wise, to divert their attention to Exhibition matters at present, and that to attempt to do so would be likely to make these Shows unpopular.

3. Under these circumstances I have availed myself of the discretion left me by His Honor the Lieutenant-Governor and have postponed the Kishnaghur Show till the season of 1865-66.

From S. C. BERRY, Esq., Junior Secretary to the Government of Bengal, to the Commissioner of the Nuddea Division,—(No. 4989, dated the 12th November 1864.)

I am directed to acknowledge the receipt of your letter No. 238, dated the 5th instant, and in reply to state that the Lieutenant-Governor has directed you to postpone, till the season of 1865-66, the Agricultural Exhibition which was to have been held at Kishnaghur at the end of the current year.

Papers regarding the Effects of the Cyclone of 5th October, and Measures adopted for the relief of Sufferers.

From the HON'BLE A. EDEN, Secretary to the Government of Bengal, to the Commissioners of the Nuddea and Burdwan Divisions,—(No. 4133-4T., dated Darjeeling, the 11th October 1864.)

I AM directed by the Lieutenant-Governor to request that you will report on the effects of the gale of the 5th instant on the country beyond the limits of Calcutta and the Suburbs, including Howrah.

From H. L. DAMPIER, Esq., Commissioner of the Nuddea Division, to the Secretary to the Government of Bengal,—(No. 240, dated the 5th November 1864.)

As required in your No. 4133T., dated 11th October, I have the honor to submit, in original, a report from the Officiating Magistrate of the 24-Pergunnahs on the effects of the gale and the measures taken by him for the relief of the suffering population to the south.

2. This report with those noted in the margin No. 213, dated 14th October, which I have addressed " 221, " 9th " direct to the Govern- " 229, " 21st " ment complete the account of operations up to the despatch of the 2nd relieving expedition under Mr. McNeile, of which I have not yet received a report.

3. Everything which Mr. Robinson reports has been done in constant personal and demi-official communication with myself and I have little to add to his account. Since I wrote the instructions on which his letter No. 792, dated 24th October is founded, I have requested the Magistrate to take active measures for the clearance of the tanks and drains in the Suburbs as well as in the interior, and I have directed him to compel those who are in a position to do so either to clear their own premises, or to pay for the cost of

having the work done by the Magistrate's workmen.

4. The thanks of the Government have already been given to the Reverend Mr. Payne; to Mr. Smith, Superintending Engineer; and to Mr. Stack, District Superintendent, for the assistance they have given in the relief operations. Mr. Robinson's exertions and activity have been incessant, and I desire to record my recognition of the willingness and efficiency with which he has worked with me in this matter.

5. The Relief Committee have placed a sum of money at my disposal for distribution towards the relief of distress in my Division. The following extract of a note which I drew up on the subject will show the steps I have taken to distribute the charity properly:—

"The money so placed at my disposal cannot be properly applied without local enquiry as to the actual losses incurred by different families; for these local enquiries several officials are available; and I have no doubt that some of the gentlemen who have already offered their services to the Relief Committee will be willing to assist.

"The tract over which I wish to make the enquiry extends from the river to a distance of about ten miles inland, from Acheepore down to Sangor Island. To the south it extends further, about twenty miles inland.

"I have divided this tract into eleven convenient circuits of about forty or fifty square miles each; I annex a statement showing the boundaries of each. I hope to be favored with the assistance of eleven gentlemen who will undertake to visit these and make the necessary enquiries at once.

"I would ask each visitor to move about the circuit assigned to him, visiting the sites of the most populous villages, and giving notice beforehand of the day at which he proposes to be at each of these, so that the men from the smaller villages around it may come in and state their case.

"The villagers being thus collected together a summary enquiry could be made, from which it could be ascertained roughly which families have really been thrown into destitution and require relief. The visitors would then draw up for every village a report showing the following particulars as to each family which he might decide on recommending for relief:—

"Name of head of family.

"Religion or caste.

"Number of persons left in the household, distinguishing the men from the women and children; rough statement of the nature and extent of losses.

"Remarks, explaining the grounds on which the family is considered entitled to relief, and stating the nature and extent of any property and means of subsistence which they still have left."

Five gentlemen have, as volunteers, undertaken circuits—

Reverend C. Driberg.

Bahoo Degumber Mitter.

Reverend W. Harrison.

Reverend G. Kerry.

Mr. Hugh Fraser.

6. The good conduct of the Police described in the 21st paragraph of the Magistrate's report will, I hope, meet with favorable notice from Government.

* * * * *

From W. L. ROBINSON, Esq., Officiating Magistrate of the 24-Pergunnahs, to the Commissioner of the Nuddea Division,—(No. 820, dated Alipore, the 27th October 1864.)

I HAVE the honor to send you this report on the late storm as far as this District is concerned for transmission to the Government of Bengal as required in Mr. Secretary Eden's letter No. 4182T. of 11th October; but before entering upon the subject, I may perhaps be allowed to state that, knowing that you have already reported generally on the results of the storm, I shall confine myself, as much as possible, to details more immediately affecting this District, and the means adopted to afford some (however inadequate) relief to the sufferers before the Public Meeting was held, and I shall, as far as possible, avoid re-stating anything already brought to the notice of Government in your reports.

2. The storm occurred, as is known, on Wednesday, 5th October; as soon as it abated, finding all the roads blocked up by fallen trees, I ordered Mr. Dobson, the Keeper of the Alipore Jail, to turn out as many prisoners as he could in the morning and clear the main roads at any rate as speedily as possible. I was out myself early and spent the greater part of that day in driving about (where it was possible) through Kidderpore and Garden Reach and giving orders for the removal of trees from the roads, and Friday morning was devoted to the same work. Before proceeding further I may state that the damage done in the Suburbs by the falling of houses, &c., has of course been very considerable, but the loss of human life has not been so very great: I cannot, however, at the present moment say exactly what it is.

3. It was on Friday night that I first heard of the disasters at Diamond Harbour almost simultaneously from the Police and from a man sent me by the Judge (he was the Nazir of the Moonsiff at Gobindpore) and it was then that I first learnt that the Deputy Magistrate was not at Diamond Harbour; on that subject I need say no more here, as I have already reported on it to you.

4. As soon as Mr. Stack returned from his visit to Diamond Harbour with reliable information as to the wants of the place and neighbourhood, I lost no time in sending out food for the starving population, and as many domes as could be procured (only thirteen or fourteen) had been previously sent down to remove as many bodies as possible. Mr. Stack had already sent out small supplies of rice and water for the Police, and after consultation with him and Mr. Beaufort, the Judge, who kindly offered his services to me in any way in which he could be useful, I determined to send out rice to Diamond Harbour and Futtehpore, a place on the road between this and Diamond Harbour, about twenty-five miles from here.

5. I had great difficulty in procuring carriage for the rice, but as soon as carts could be got together, 50 maunds of rice were hurried down to Diamond Harbour and the same amount to Futtehpore, and fresh supplies were constantly sent to keep up these depôts until the Relief Committee was appointed. As soon as I heard of the distress at Acheepore also, grain was sent out there, and a depôt has been subsequently established at Dabepore, which latter, as well as the one at Futtehpore, I am still keeping up for this reason, that the places named are inland and not easily

reached by parties from the Steamers sent down by the Relief Committee. Moreover, the distribution* has been made

i. e., at these three inland places.

all along by the Police for want of other agency, and as I imagine that a lengthened continuance of these supplies will not be required, I have thought it best to continue them myself for the present.

NOTE.—The Relief Committee have undertaken to pay for all supplies sent out by the Magistrate after the date on which the Committee came into existence.

6. A list is appended shewing, as nearly as I can, how many persons have been relieved by the supplies forwarded officially, and totally irrespective of the proceedings of the Public Relief Committee, and I do this solely and entirely in consequence of remarks I have heard, that nothing had been done officially to relieve the distress until the public meeting was held, an opinion which, if it exists, I cannot admit to be correct.

7. That the aid afforded was not as great as it might have been, no one will more readily allow than myself, but I assert that it was as much as the information at first obtainable warranted and the means at my disposal permitted me to afford; it was very difficult, as you are aware, to get accurate information at a later period even, and the difficulty of procuring carriage at first may be surmised from the fact that 1,000 Rupees a day was demanded from Mr. Fraser for a cargo boat to take down supplies, and I was compelled to have recourse, to carts, which were almost equally difficult to get; I may add that from Futtehpore salties are now sent with rice daily on each side of the Diamond Harbour road to the south-east and south-west to relieve the wants of villages at any distance from Futtehpore itself.

8. With the course which has been taken to supply the Sub-Division of Baroepore with food you are acquainted, and as that relief has been supplied by the Relief Committee (though the means of transport was provided by Government) I need not perhaps further allude to it here except to state that the distress was not nearly so great about Joynugger as I had at first been led to suppose.

Houses have of course been blown down everywhere, and a good deal of distress necessarily has been caused by that and the natural rise which took place at once in the price of everything, but the latter is a difficulty which will soon solve itself if left alone.

9. The part of the District which has really suffered greatly is from Rangafulla and Saugor Island up the River bank to Acheepore, and inland from the River for a distance of, I should say, from five to eight and ten miles, in fact that part of the District over which the storm wave extended.

10. Throughout this tract of country, the loss of human life and destruction of cattle and crops has been very great and the survivors must also have suffered very much, at first at least, from want of food, but already I hope a great change for the better has been effected. So far as my own opinion goes I do not think there has been much suffering from want of water, because the river water is at least drinkable, and the distressed people were all, it may be said, within reach of the river.

11. As far as I can learn the Sunderbunds, except perhaps one or two lots, have not suffered so much as the parts of the District above alluded to. I have heard of one or two cases of loss of

life only and of a few bunds being broken, but none of the reports speak of any such amount of distress existing as to make special measures for its relief necessary.

12. Wherever the storm wave extended I fear there will be a great loss of the rice crop; already I hear from the neighbourhood of Dabeepore that it has turned black, and this, I fear, will be the case with the greater portion of the crop in the submerged District.

13. You are aware of the measures taken by the Relief Committee to afford still further help so I need not give any account of them; but I may state that the suggestions you made for the baling out of tanks filled with salt-water, and for clearing out the small branches, leaves, and other debris blown by the storm into other tanks have been ordered to be carried out, as the accompanying copy of my letter on the subject will shew.

14. I may also state that there are upwards of sixty domes employed in removing carcasses; it was with great difficulty, and only by giving a very high rate of pay, 1 Rupee a day, that I could get so many. They have already cleared the road from Joynuggur to Chlpee; but they are not all working at one place, I thought it better to subdivide them, and sent parties to Diamond Harbour, Gobindpore, Bankeepore, Sultanpore, and Dabeepore to work under the superintendence of the Police and to commence clearing away from those points. I should like to have obtained more men but it was impossible; even the offer of a Rupee a day failed to tempt domes from Barrackpore, where many live, but Major Sneyd says they have plenty of work to do there and will not go to a distance.

15. With regard to the actual loss of life in the District I have not yet got accurate information on the subject, but the following casualties have already been reported:—

	<i>Lives lost.</i>
Sudder Sub-Division	... 49
Baroepore	... 19
Nyehatty Police Station	... 8
Nowabgunge	... 31
Dum-Dum	... 7
Busseerhaut	... 8

these may be mostly put down as caused by the falling of houses and trees.

From Diamond Harbour 1,360 deaths are reported chiefly in the jurisdiction of Gobindpore Police Station. No returns have yet come in from the Sultanpore Station, where the loss of life is supposed to have been quite as great as near Gobindpore; the first expedition sent down by the Relief Committee estimated the loss of life at Rangafulla at about 70 per cent., but Mr. Stack thought 50 per cent. would be a moderate average.

16. I may state here that the bodies of Mr. Aitken, the Inspector of River Police at Diamond Harbour, and his family, have not been found, with the exception of one child, who was buried. I thought the bodies had been buried in the ruins, but such was not the case, they must have been swept away by the water into the interior as was the case with the body of the Inspector of Calcutta Police, who was also drowned.

17. In eleven villages in the Diamond Harbour Sub-Division, the property of Baboo Rajkissen Mitter, out of a population of 2,266 no less than 406 lost their lives. This Zemindar informs me that on 14th October he sent down one boat with provisions, and another on 23rd instant,

which he calculates will supply the wants of his people until the time of harvest.

18. Since commencing this letter several of the inhabitants of the distressed part of the country have been coming to me with petitions for help; yesterday I had a deputation from Joyntee, Jugornathpore, and Nowpara, in the vicinity of Akra; these people put down the number of houses in the three villages as 1,900, and the loss of life at 100; they say that about 10 annas of the dhan has been lost and the object of their petition was that their Zemindar might be directed to remit half their rents, when they would, they said, be able to get round without further relief. Yesterday again a large crowd presented petitions to the same effect, of course I am unable to pass the order they wish, but if I may be allowed to express an opinion, I think such a remission is one that would be felt by all as a great help if speedily made known.

19. I have not thought it necessary to call in the aid of any extra Police, except a few Constables whom the District Superintendent applied for; there were one or two cases of plunder by starving people merely to get food, as for instance near Atcheepore where the Mahajuns who had rice refused to sell, and their stores were in consequence sacked by the starving wretches who, if they contravened the law, only acted as men placed in such a position would naturally act.

20. In the Diamond Harbour Sub-Division only has the Police Force been nearly doubled; there were there ordinarily 2 Inspectors, 4 Sub-Inspectors, 12 Head Constables, and 70 men; there are now 4 Inspectors, 8 Sub-Inspectors, 19 Head Constables, and 130 men. The District Superintendent thinks this Force quite sufficient and I agree with him.

21. I cannot quit this part of the subject without bringing to notice the good conduct of the Police at Diamond Harbour. When the storm burst they stuck to their post till the very last, and when forced to leave, brought with them nearly all the prisoners in the lock-up, and all the Government treasure, amounting to some 8,000 Rupees. These men must have suffered considerable loss personally and with regard to uniform, &c., and I think if any compensation could be granted to them it would be well bestowed.

22. I also wish to bring to notice the great assistance I have received throughout from the District Superintendent of Police, Mr. Stack, who, though not in very good health, has never spared himself but has been most energetic and indefatigable in assisting me in the measures necessary to relieve the sufferers even when what was desired did not come within the scope of his own particular duties as District Superintendent of Police. My best thanks are due to this Officer as well as to Mr. French, Assistant Superintendent of Police, who has also been of great use to me; and in conclusion I will only express a hope that, taking all circumstances into consideration, the measures I adopted in a time of no ordinary difficulty will meet with the approval of the Lieutenant-Governor.

Statement showing the amount of food sent out by the Magistrate and the number of people to whom it was distributed apart from the operations of the Relief Committee.

130 maunds of rice was sent to Diamond Harbour, but as soon as the Relief Committee's

supplies were received there they were thrown into a common stock, so it is impossible to say how many were fed from the rice sent down by me. Some hundreds were certainly relieved before the Steamer went down there.

Puttehpore.—To this place 224 maunds of rice were sent and 7,304 have been relieved, but this does not shew the total who have actually benefited, because I left a discretionary power with the distributors as to the amount to be given, and when people came evidently from a distance, were in great distress, and had families at home wanting food, more rice was given to them to enable them to take some home. Rice is still being sent out to this depôt as the stock there decreases.

Dabeepore.—100 maunds of rice have been sent to this depôt, and from the first despatch of 50 maunds 2,068 persons were fed up to 24th instant.

Atcheepore.—102 maunds were sent to this place and 2,492 persons were relieved from it up to 19th instant.

Total 556 maunds of rice.

Persons relieved 11,864. But I think it may fairly be considered that at least a third more than that number actually received relief owing to the plan adopted as stated above.

W. L. ROBINSON,
Offg. Magistrate.

ZILLAH 24-PERGUNNAHS,
The 27th October 1864. }

From W. L. ROBINSON, Esq., Officiating Magistrate of the 24-Pergunnahs, to the Deputy Magistrate of Diamond Harbour and Baroepore,—(No. 792, dated Alipore, the 24th October 1864.)

I HAVE the honor to state, with reference to the condition of tanks in your Sub-Division, that you should make every exertion to get the people themselves to clear them from leaves, old straw, or other matters blown into them during the recent storm; the leaves and small branches should all be collected together and burnt as soon as possible. If you cannot get the people to do the work themselves you should employ, if possible, the suffering population who are now fed by the Relief Committee in this work, making it a condition that an able-bodied man who refused to do the work should not receive food. Where food is wanted you can pay in food, and where a man with a family works at clearing tanks his family may get a supply of food too if necessary; where food is not required you can pay in money. You will probably find the people themselves, or at any rate the sensible part of them, willing to aid in this work, and to afford information as to what tank or tanks in a village are most necessary to be cleansed at once. It is very necessary that this work should be done promptly, otherwise it may be feared that an epidemic will ensue.

2. Again in some of the tanks which have, I believe, been filled with salt-water, if that water is baled out, fresh water will gradually rise in the tank. Some villagers have expressed their willingness to bale out such tanks if, during the time they are so employed, food be supplied to them and their families; this you are at liberty to grant. Baskets for baling will, if possible, be sent down by a Tug Steamer on Wednesday to Diamond Harbour and Culpae, and if they are not enough you can, I imagine, easily arrange

some process for baling by other means. Where a tank is being baled or cleaned out, no khorakeo must be allowed to any able-bodied male unless he has been working either at the cleaning operations or *bond fide* in putting up his house.

3. You will be good enough to keep me duly informed how you get on with this work.

From the HON'BLE A. EDEN, Secretary to the Government of Bengal, to the Commissioner of the Nuddea Division,—(No. 5038, dated the 15th November 1864.)

I AM directed to acknowledge the receipt of your letter No. 240, dated the 5th instant, and enclosure, reporting the measures adopted by the Officers of the 24-Pergunnahs and others to afford relief to sufferers from the late Cyclone, and in reply to request that the thanks of Government may be conveyed to Mr. Robinson, the late Magistrate of the 24-Pergunnahs, for the energy and judgment with which he did all in his power to meet a great and sudden emergency. I am further to request that Messrs. Stack and French, of the Police Department, may be informed that the Lieutenant-Governor has read with sincere pleasure the testimony to their zeal in affording relief to the sufferers which is borne by Mr. Robinson. I am also to record the Lieutenant-Governor's approval of the way in which the Police at Diamond Harbour conducted themselves during the late crisis.

* * * *

3. I am to convey His Honor's approval of the arrangements made by you for the clearance of the tanks and drains in the Suburbs as well as in the interior, and for the proper distribution of the funds and supplies placed at your disposal by the Relief Committee. I am at the same time to request that you will be good enough to thank,

• The Reverend C. Driberg.
Habee Begumbar Mitter.
The Reverend W. Harrison.
G. Kerry.
Mr. Hugh Fraser.

in the name of Government, the gentlemen* who have so humanely volunteered to assist in distributing the relief afforded

by public subscription. The thanks of Government should also be conveyed to Mr. Beaufort, the Judge of the District, for the voluntary offer of his services.

4. The original enclosures which accompanied your letter under reply are herewith returned.

Papers relative to the defective Registration of Coolies on Tea Plantations in Cachar.

From S. C. BATLEY, Esq., Junior Secretary to the Government of Bengal, to the Commissioner of the Dacca Division,—(No. 2411, dated the 14th July 1864.)

With reference to the extract marginally noted,

Para. 10.—"Under the old system we have 11,351, which added to the existing importations last year would give 20,888 as the number (of Coolies) which should actually be in the District now; whereas the number as returned is only 18,488, being 2,399 coolies to be accounted for within one year."

from the Report No. 252, dated the 7th May last, from the Deputy Commissioner of Cachar, on the progress made in Tea cultivation during the year 1863-64, I am

directed to request that you will call upon him to explain the discrepancy between the number of Coolies that ought to be in the District and the number returned as actually in the District.

From C. T. BUCKLAND, Esq., Commissioner of the Dacca Division, to the Secretary to the Government of Bengal,—(No. 199, dated the 24th September 1864.)

With reference to your No. 2411, dated 4th July, I have the honor to submit, for the information of the Lieutenant-Governor, copy of the correspondence noted in the margin.

2. I fear that the result is not satisfactory, but it would be of little use now to push any further inquiries regarding the disappearance of Coolies last year. The Accounts or Registers kept at the gardens are apparently not sufficiently accurate. But, considering the heavy pecuniary loss represented by the loss of so many laborers, it must be the interest of the Planters and of the Proprietors and Shareholders in Tea Gardens to have such Registers made compulsory as Captain Stewart suggests, and, on the other hand, the Government is bound to insist on some such precaution for the protection of the interests of the laborer.

From C. T. BUCKLAND, Esq., Commissioner of the Dacca Division, to the Deputy Commissioner, Cachar,—(No. 45, dated the 16th June 1864.)

With reference to the 10th, 11th, and 12th paragraphs of your No. 252, dated 7th May, to the Secretary to the Government of Bengal, on the Tea cultivation of Cachar, I have the honor to request that you will endeavor to ascertain from one or two of the Tea Planters how they account for the disappearance of their own proportion of the 6,251 Coolies who cannot be found.

If a Planter in 1862 had 200 imported Coolies in his employ, and in the course of 1863 imported 150 more, but at the end of 1863 can only return 300 men as employed, it is clear that he must have some idea of how the missing 50 disappeared, whether by death or by absconditure, or by imprisonment for breach of contract, and it will be for his advantage to give you the information, so that some measures may be taken to stop this enormous loss to the Planters. I was told yesterday that the cost of an imported Cooly now amounts to 70 Rupees, so that 6,251 x 70 shows a dead loss of nearly four lakhs and a half of Rupees, which is about one-fourth of the whole expenditure of the past year.

From CAPTAIN R. STEWART, Deputy Commissioner of Cachar, to the Commissioner of the Dacca Division,—(No. 171, dated the 13th September 1864.)

On receiving your letter No. 45 of the 16th June, regarding the number of imported Coolies missing in Cachar, I addressed the letters, copy of which I enclose, to the undermentioned gentlemen against whose Companies, as per their Returns, numerical deficiencies, as noted opposite their names, were apparent:—

Coolies.

Messrs. Morgan, Serisporo Tea Company	508
" Betts, Victoria Tea Company	421
" Philips, Central Cachar Company	628
" Wood, W. B. Money	194
" Tydd, Tydd, Forbes and Company	569
" Stewart, Bengal Tea Company	469
" Sandeman, Eastern Bengal	862
" Livesay, Robert and Charriol	355

Messrs. Morgan and Livesay have not yet replied, although their attention has been again

drawn to the letter, and I proceed to notice the replies I have received."

Mr. Betts says,—“ I would beg to remark that the Return of imported Coolies sent in by the late Manager could not have included those of Kalacherra, another Division of the Victoria Tea Company's Gardens. Since the date of the Return for 1863-64 Mr. Fugger has received 184, and 1 267, which will make up the number at present unaccounted for.” But they make up more than the number, viz. 451, and should not be calculated at all, and there would seem to have been no deaths, abscondments, or discharges whatever, which is not probable.

Mr. Wood regrets that no Register of Coolies has been kept at his garden. But he says, judging from previous experience, I believe the average percentage of loss per annum of the Coolies is as follows :—

1st year.	6 per cent.	run away on road.
2	„	die on road
8	„	die 1st year.
12	„	run away 1st year.
—	28 per cent.	

2nd year.	5 per cent.	die.
8	„	run away.
—	13 per cent.	

3rd year.	4 per cent.	die.
2	„	run away.
—	6 per cent.	

Total	47 per cent.
-------	--------------

Mr. Philips accounts for the deficiency in his gardens thus—

Number of Coolies discharged before May 1863 and May 1864	...	158
Number of Coolies died	...	246
Number of Coolies employed as Burkundauzes, May 1864	...	136
Number of Coolies in May 1864	...	738
Total	...	1,278

But this actually only accounts for 404 out of 628, and there seems to have been no runaways at all, which is improbable.

Mr. Tydd says that no regular Register has been kept at his garden, and ninety-nine souls imported for Tydd, Forbes and Company had been made over to the South Cachar Tea Company, and he mentions that the actual numbers now (4th August) employed on Tydd, Forbes' grant is 510 not 340, others having come up since the Return was sent in. This goes beyond the year under review.

Mr. Stewart sends in an amended Return which agrees neither with the Return of May 1863 or May 1864 of the Manager, his predecessor. This shows a deficiency of 280 only instead of 469, which are accounted for thus: 74 deaths, 33 runaways, and 173 discharged. But his balance on May 1863 he makes 823 only, whereas by his predecessor's Returns it was 901, and he credits himself with only 340 Coolies during the year, whereas 398 were sent him.

Mr. Sandeman answers that his casualties have been only 227 during the year, and that he has 1,126 remaining on his gardens. But these Returns are made up to 1st September 1864, and in the previous Returns 1,162 were reported to be at work four months ago, while others must have arrived since.

The above are the answers received from the principal Concerns in which there were large deficiencies, and it will be seen that they are far from satisfactory. The fact is that no sort of account appears to have been kept of the number of Coolies received, or those who have died or absconded, been discharged or imprisoned, and that there is no means of arriving at a correct result. I may mention that there are at present 102 imported Coolies in Jail for breaches of contract: &c., and that since May 1863 altogether 252 have been imprisoned on this account, and others, who seldom, if ever, return to their gardens.

My letter No. 252 of the 7th May last shows that out of 11,322 Coolies sent up from Calcutta 971 died or absconded on the journey, one which occupies on an average about one month; this is upwards of 8½ per cent. on the total amount. The dying and absconding goes on for the twelve months in Cachar at lessened proportions, and thus in the twelve months 6,251 disappear out of 20,686, or about 30 per cent.

No Registers having been kept in the gardens hitherto it is impossible to state how many die or how many run away, and there are no means of ascertaining this now. The keeping of Registers of this kind and the regular submission of them should be made compulsory.

From S. C. BAYLEY, Esq., Junior Secretary to the Government of Bengal, to the Commissioner of the Dacca Division,—(No. 3614, dated the 26th October 1864.)

I AM directed to acknowledge the receipt of your letter No. 199, dated the 24th ultimo, and in reply to say that, in the Lieutenant-Governor's opinion, the state of things disclosed in your letter is so extraordinary and so absolutely without reliable explanation that no time should be lost in attempting to find a remedy.

2. Of the number of Coolies imported into one Estate a deficiency of 47 per cent. has to be accounted for at the end of three years, and taking the whole District together, it appears that of the Coolies sent up 30 per cent. are missing at the end of the same period.

3. It seems that, as a rule, no Register of Coolies imported, or of deaths, or desertions, or of convicted Coolies is kept up, and this enormous deficiency is in no way accounted for.

4. With a view to apply a remedy to this unsatisfactory state of things a proposal for making registration compulsory will be introduced into the Bill for providing for breach of contract, &c., which is to be laid before the Legislative Council when it meets. In the meantime it is desirable that you should use whatever influence you possess as Commissioner of the Division in persuading the importers of labor to keep up a complete Register of their Coolies no less for their own information and pecuniary advantage than for the ultimate benefit of the Coolies.

From S. C. BAYLEY, Esq., Junior Secretary to the Government of Bengal, to the Secretary to the Landholders' and Commercial Association,—(No. 3617, dated the 26th October, 1864.)

I AM directed to forward copy of a letter, and of its enclosures, from the Commissioner of Dacca, No. 199, dated the 24th ultimo, relative to the deficiency in the number of Coolies returned as actually present on the various Cachar Plantations during the past year below the number imported, a deficiency which the Association will observe is in no way even approximately accounted for.

2. It will be observed that of the number of Coolies imported into one Estate a deficiency of 47 per cent. has to be accounted for at the end of three years, and, taking the whole District together, it appears that of the Coolies sent up 30 per cent. are missing at the end of the first twelve months.

3. It seems that, as a rule, no Register of Coolies imported, nor of deaths, runaways, nor of convicted Coolies is kept up, and there is in consequence absolutely no reliable way of accounting for this great deficiency.

4. It is obvious that this deficiency, whatever may be the cause of it, represents an enormous loss to the importers of labor, and as the first step towards applying a remedy to the existing evil must be to find out accurately what proportion of the deficiency is to be attributed to deaths, what to desertions, what to convictions and other causes, the Lieutenant-Governor proposes, no less in the interest of the importers of labor than of the laborers themselves, to introduce a Clause, making the registration of imported laborers compulsory, into the Bill for providing for cases of desertion and breach of contract, &c., which he intends laying before the Legislative Council when it meets.

5. I am to request that the Lieutenant-Governor may be favored, as early as possible, with the views of the Association on this subject.

From J. DICKINSON, Esq., Secretary, Landholders' and Commercial Association, to S. C. BAYLEY, Esq., Junior Secretary to the Government of Bengal,—(dated the 4th November 1864.)

I have to acknowledge receipt of your letter No. 3617 of the 26th October, forwarding copy of a letter, with enclosures, from the Commissioner of Dacca, relative to the deficiency of Coolies

returned as actually present on the various Plantations in Cachar during the past year below the number imported.

The Committee had their attention directed to the subject by the publication in the *Gazette of India* of the 16th July last of Captain Stewart's Report, dated the 7th May, and I was directed to obtain information on the subject of the return.

This I endeavored to do, but hitherto without such an amount of success as to enable the Association to bring the subject to the notice of Government. Indeed the absence of all precision from the Report renders it an impossibility to test its accuracy, and I am directed to say that the Committee regret that Captain Stewart, when called upon for explanation, did not clear up the doubtful points of the return.

The want of precision to which I refer consists in the absence of all dates from the Tabular Statement. The document itself is dated the 7th May as is the letter forwarding it, but there is nothing to shew the date to which the arrivals are taken to make up the total of 20,686, or the dates to which the returns from the gardens extend.

The balance unaccounted for depends entirely on the whole return having reference to one fixed date, and in the absence of any means of knowing that this has been attended to the inference is that Captain Stewart's total includes all imported laborers to the date of his letter or to within a few days of that date, whilst the returns from sixty-one separate Tea Estates cannot possibly refer to one fixed time unless that time be a date of a month or more old.

To give an instance, the Elgin Tea Company is returned as having no imported laborers, whilst the Secretary informs me that ninety-eight souls reached the Station, where Captain Stewart resides, on the 1st May. It is evident that the value of Captain Stewart's return depends upon whether these ninety-eight souls are included in his total, whilst they are excluded from his detail, and supposing the Estate returns to be a month or more old whilst arrivals to the early part of May are included in the total, there are doubtless many cases similar to that of the Elgin Estate.

Again in Captain Stewart's letter of the 13th September Mr. Philips, in accounting for his deficiency, gives "number of Coolies employed as Burkundauzes in 1864 136," from which it is to be inferred that his return given in the Tabular Statement of the 7th May did not include Burkundauzes and if not Burkundauzes naturally not children and probably not women.

Then again I am informed by the Secretary that between May 1863 and May 1864 the Bengal Tea Company alone discharged 173 laborers.

The absence of dates and want of precision in Captain Stewart's Report prevent the Committee from stating positively that the return is incorrect, but the impression left upon their minds by the consideration of the Report itself, and of the imperfect evidence they have obtained, is that it is essentially so, and that on a Statement so loosely

compiled Captain Stewart ought not to have spoken of the difference of 5,100 as appalling, as if that number had died or disappeared in some other fatal way.

Although the Committee, for the reasons given, are not inclined to look upon Captain Stewart's return as very trustworthy, they are aware that there have been very serious losses from deaths and more especially from desertion, and that it is very desirable that accurate statistics should be obtainable.

They are therefore quite prepared to approve of a clause making the registration of imported laborers compulsory and will gladly see it introduced into a Bill, providing satisfactorily for desertion and breach of contract.

I am also directed to express the satisfaction of the Committee that such a Bill is about to be introduced as they have felt, for some time past, that the most important interests of the Tea Districts were becoming jeopardized by the impossibility of dealing properly with the labour question in the existing state of the Law.

Correspondence relative to the Cultivation of Indigo as a rotation Crop.

From J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta, to the Hon'ble A. EDEN, Secretary to the Government of Bengal,—(dated the 23rd September 1864.)

IN compliance with the wish expressed in the 2nd paragraph of your letter of the 4th June, and in fulfilment of the promise contained in my answer of the 18th June, a Circular was addressed to those gentlemen who were, or had been, engaged in agriculture for such information as to the advantage of a rotation of crops as their experience might have enabled them to acquire, and I now beg to send a copy of that Circular and of all the answers to it which have been received up to this date.

2. The Committee desire me to say that every answer received is sent in *full*, for, although some contain matter irrelevant to the question, it is thought better to submit these than to leave the Association open to the suspicion of having selected what was favorable to their own views and of having omitted what may have told against it.

From J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association,—(dated the 19th July 1864.)

IN a correspondence with Government, the first portion of which has been circulated and published in the Newspapers, the Association have contended that "Indigo is one of those green crops which, being cut or eaten off without maturing their seed, do not exhaust the soil but rather actually increase its fertility with reference to the grain crop which is to follow it. Such green crops are a modern refinement of agricultural science, as advantageously taking the place of the former fallow, and the returns from such crops cannot, therefore, be contrasted with the

"main grain crop to show the difference in value to be a loss on the cultivation of the green crop, but should be contrasted with the no-return of the fallow which it re-places, thus showing the whole profits from the green crop to be a direct gain to the cultivator."

The Government doubt the truth of this view, and even go so far as to assert that it is generally believed by the Ryots that Indigo exhausts the soil more than any other crop.

The Government have, however, applied to the Agricultural Society for their opinion on the subject, and have said that they "will be glad to receive from the Association an account of any actual experiments made by individual Planters in order to test the correctness of the theory now advanced."

The Committee do not suppose that any Planter has made experiments to test the theory of rotation of crops, but they have no doubt that, in the course of their experience, very many Planters have ascertained the advantages of change of crop and can speak to the fact of their own knowledge, and also to the fact of the Ryots being alive to the benefit of obtaining Indigo land for their Rice crops, although they may not have given much thought to the rotation of crops as a practice to be systematically followed.

The Committee will feel greatly obliged by your stating how far of your own knowledge Indigo is found to be as good a preparation for Rice crops as leaving the land uncultivated or fallow, as it is called, and how far this is known to be the case by the cultivators.

You will recollect that the correspondence has reference to the high lands of Kishnaghur which are never inundated, and which are declared judicially to require to be fallow one year in four, and that your answers should have reference to land of similar description.

Requesting the favor of an early reply, I am, &c.

To

- | | |
|---------------------------------|--------------------|
| 1. T. J. Kenny, Esq. | ... Salgamoodia. |
| 2. H. Sibbald, Esq. | ... Meherpore. |
| 3. W. Macnair, Esq. | ... Joradah. |
| 4. G. Meares, Esq. | ... Sindoorce. |
| 5. D. H. Kearnes, Esq. | ... Boroganty. |
| 6. E. Chardon, Esq. | ... Lokenathpore. |
| 7. J. White, Esq. | ... Bausbarriah. |
| 8. R. P. Suge, Esq. | ... Chowkeedanga. |
| 9. G. R. Clarke, Esq. | ... Singitollah. |
| 10. M. Durop de Dombal, Esq. | ... Muddunderry. |
| 11. J. Hills, Esq. | ... Neechindepore. |
| 12. A. Hills, Esq. | ... Katcheekatta. |
| 13. Robert Harvey, Esq. | ... Khal Bolia. |
| 14. R. P. Stevens, Esq. | ... Hazrapore. |
| 15. A. S. Sawers, Esq. | ... Culna. |
| 16. J. Forlong, Esq. | ... Durthungah. |
| 17. Messrs. Erskine & Co. | ... Elambazar. |
| 18. W. B. Baldwin, Esq. | ... Soobunkally. |
| 19. { J. P. Hampton, Esq. ... } | Deorianaggar |
| { J. P. Wise, Esq. ... } | |
| 20. F. Collingridge, Esq. | ... Doudpore. |
| 21. J. J. Gray, Esq. | ... Goomattee. |
| 22. A. S. Urquhart, Esq. | ... Pootnee. |
| 23. J. S. Smith, Esq. | ... Haringpore. |
| 24. J. F. Curtis, Esq. | ... Ramoolah. |
| 25. T. E. Omer, Esq. | ... Buxty. |

From T. J. KENNY, Esq., Salgumoodia Factory, to J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta,—(dated Salgumoodia, the 31st July 1864.)

In reply to your letter of the 19th instant, I beg leave to state that it is well known by all practical Agriculturists—European and Native—in Lower Bengal, that Indigo is not an exhausting crop, and that lands sown in Indigo will, in the following year, give twenty-five to seventy-five per cent. more Rice than similar and adjoining lands that had been sown with Rice for one or more years previous. Good Ryots, men who attend to the cultivation of their lands, and who are not always to be found about Courts' and Mookhtears' doors, are always anxious to exchange their Rice lands for our Indigo lands, as they know that for at least two years they will get heavier crops from the latter, and in the interim their own lands will get into good condition. Before the Indigo disputes (1860) I used to exchange a great portion of my lands with the Ryots, and now that matters are quieting down a little the Ryots are trying to introduce the system again, and will, no doubt, do so to our mutual benefit, if not prevented by ill-disposed leaders of useless agitation. I have had many such applications during the past month, and shall have many more before October.

I send some Deeds of Exchange of lands such as we are in the habit of giving and receiving; the Ryots hold counterparts signed by myself or by my Assistants. I can send a great number if required, but the accompanying will be sufficient to show the nature of such transaction.

The best way to prove assertions like the above is by ocular demonstration, and I am prepared to show, to any person appointed by Government for the purpose, lands that were in Indigo last year and are now in Rice, and adjoining lands that have been in Rice for a couple or more years, the crops on the former being twenty-five to seventy-five per cent. better than those on the latter. I shall show such crops in the neighbourhood of Koosteah in twenty-five places and upon all kinds of lands, and any person deputed to see them may be back in Calcutta on the evening of the day after that on which he leaves there.

Should any person be appointed to investigate the matter it is to be strictly understood that no official announcement to that effect is to be made, nor is that person to state that he has been deputed for any such purpose, as, if made public, men who are interested in keeping up agitation would interfere, so that the truth could not be arrived at. The Ryots of the different villages could be called upon to point out lands that were sown in Indigo or in Rice the year before, and, if necessary, I shall produce the chitta of my Indigo lands for that year, in which the quantity and boundaries of the lands are defined.

As the Rice crops are now almost ripe any investigation to be made should be done within the next twelve days.

From H. STRAUSS, Esq., Meherpore Factory, to J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta,—(dated Meherpore, Nuddes, the 2nd August 1864.)

In reply to your Circular of the 19th ultimo, received by me on the 30th, I may state that, from my own observation of the fine crops of

Rice following on Indigo, I believe the latter to be as good a preparation for Rice as leaving the ground uncultivated or fallow. It is further remarkable that, whereas (attached to many of the villages within this Nundunpore and Sonadah Circle) I have at my disposal a considerable quantity of ground which has lain fallow, more or less, for a number of years, I find that in preference to breaking up such soil the Ryots are ever ready to possess themselves of any Neezabad Indigo lands which I may throw up at the end of a season. Since the receipt of your Circular I have spoken to several of the principal cultivators in this quarter, (Nutteepattah Factory,) and without exception they all attest to the fact of Indigo being a valuable preparation for the Rice crop, and more so than any other. They mentioned also a circumstance alluded to in a former correspondence between the Bengal Government and your Association, viz. the advantage to the soil derived from the shedding of the lower Indigo leaves, an assertion which I myself did not appreciate, as considering the fall to be too inconsiderable to merit remark: since the Ryots themselves, however, seem so generally alive to the matter, I fancy the benefit may be considered conclusive.

From W. MACNAIR, Esq., Joradah Factory, to J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta,—(dated Joradah, the 4th August 1864.)

In reply to your Circular letter of the 19th ultimo, I beg to say that, as far as my experience goes, I have always found a rotation of crops of the utmost advantage both for Indigo and Rice, and that lands sown in Indigo are not at all exhausted by that crop, but on the contrary it enriches the ground and is equivalent to its laying fallow.

The Natives of this part of the country are quite aware of this and regard lands that have been sown in Indigo in the same light as fallow, and are always anxious to get such for Paddy, as it generally ensures them a good crop.

These remarks apply particularly to high lands; those subject to inundation are of course always fertile.

From G. MEANES, Esq., Sindoorce Factory, to J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta,—(dated Sindoorce, the 29th July 1864.)

In reply to your's of the 19th instant, I beg to state that I consider sowing Indigo on lands that are afterwards to be sown with Paddy is quite as good a preparation as leaving the lands fallow.

The leaves of the Indigo plant, which always fall more or less, are an excellent manure, and the lands are well cultivated.

On receiving your letter I sent for several of the most intelligent cultivators about here, who hold lands which are never inundated, and they all agreed in saying that Indigo crop was an excellent preparation for a Rice crop.

I have been a Planter for many years, and the best Ouse crop I have ever seen was cut from lands previously sown with Indigo.

If lands are properly cultivated for Indigo, and are sown with that and a Paddy crop alternately, I should say there is no occasion ever to leave them fallow.

From D. H. KEARNES, Esq., Manager of the Boroganty Concern, to J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta.

I HAVE received your letter of the 16th July, wishing to know my opinion whether land sown with Indigo decreases the fertility of the soil with respect to the productiveness of the following cold weather crop the Ryots sow on Indigo land, such as Soorsa, Moosoori, &c., on high land not subject to inundation.

In reply I beg to say that, during my experience of thirty-five years in the Indigo line, I never heard of such a complaint made by any Ryot; the Ryot, by sowing Soorsa, &c., on Indigo land, is a great gainer in the end, because he not only gains the value of the Soorsa, or Mustard crop, but has his land ready cultivated for the Indigo crop, which he is enabled to sow with one ploughing.

Again, the Ryots have given me their Paddy land to sow Indigo in, and taken my Indigo land to sow Paddy in, for a term of three years; and in this case both Indigo and Paddy crops have yielded nearly double their former produce to the satisfaction of both Planter and Ryot.

From E. CHARDON, Esq., Lokenathpore Factory, to J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta,—(dated Lokenathpore, the 29th July 1864.)

I AM in receipt of your communication regarding green crops in the Kishnaghur high lands, that is, lands suited both to Indigo and "Ouse" Paddy. I can only state that I have now been an Indigo Planter for nearly fourteen years consecutively, eight of which have been in the Kishnaghur District, and my cultivation generally with the very lands to which you refer, and that to obtain a good Paddy crop, it is actually necessary that the lands should have either Indigo one year and Paddy the next, or Paddy one year and Indigo the next (unless it be in some obscure, particular, rich, or manured spot close to a village.) No *malhan* lands will yield a fair crop of *either* Indigo or Paddy for more than one year.

I have seen some cases in which the same fields have been sown three years running with Indigo, and, other three years running with Paddy, the second year the crops of both were very inferior, and the third year it actually gave no return whatever. If the land is left waste one year it will give a good crop of Paddy, but the Ryot loses his most valuable crop, that is, the winter crop, or mustard, linseed, &c., whilst by having Indigo, he secures that crop, since the moment he clears his field of Indigo two ploughings enable him to sow his winter crops, and his land is quite clear of all weeds, as the moment the Indigo gets high it destroys them entirely. If the Ryot was obliged to prepare uncultivated lands in October to sow his winter crops, it would cost him four times the same amount, and the heat of the earth and want of moisture would insure its failure. I may add that since I am a Planter all my spare time has been spent in private agricultural pursuits, and I have been particularly successful in most plants, fruits, and vegetables. My private garden is now full of Indigo, as I find from experience that I never produce such fine vegetables as when my garden has had a crop of Indigo during the rains,—this entirely destroys the argument that Indigo weakens the lands. On the

contrary, if a Ryot cannot afford to manure his land, (which he seldom can, and when he can he never does,) the Indigo plant is the most valuable one to strengthen his field, as half the leaves fall on his land before it is cut, it rots on it, and "leaf manure" is acknowledged by all Agriculturists to be one of the best manures in the world.

From J. WHITE, Esq., Bausbarriah Factory, Kishnaghur, to J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta,—(dated Bausbarriah, the 30th July 1864.)

I HAVE the pleasure to acknowledge receipt of your letter dated 19th instant, and in reply beg to send the information required.

1st.—A rotation of crops on the high māt lands of this District, where my experience has been for many years, is not only beneficial, but necessary.

2nd.—As regards Indigo being an exhausting crop I have only found it so as far as *that crop* is concerned. The same rule holds good with regard to *Rice*.

3rd.—With regard to the opinion of those who imagine that Ryots object to sow lands exhausted as regards *Indigo* with *Rice*, it will be no difficult matter to show it is quite erroneous, as on occasions of lands (Neezabad) being thrown up after showing signs of exhaustion, those lands are eagerly sought by Ryots for their *Rice*. Mohajuns, who are all for *Rice*, as far as it can be grown with success, agree that a change of crop is necessary, and that no change is better than *Indigo*.

P. S.—Should any Ryots give a contrary opinion to that which I have above recorded, you may depend on its not being from conviction, but for some purpose of their own.

From R. P. SAGE, Esq., Chowkeedanga Factory, to J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta,—(dated Chowkeedanga, Ranegunge, the 6th August 1864.)

ON the 4th instant I received your printed letter, dated 19th ultimo, requesting me to state how far of "my own knowledge Indigo is found to be as good a preparation for Rice crops as leaving the land fallow, &c., and how far this is known to be the case by the cultivators." My answer is, "that I believe every intelligent Ryot knows, as well as I do, that land which has yielded a good crop of Indigo plant in June, July, or August must have been a *well ploughed*, or *dug* piece of ground, and also *carefully cleared* of weeds, and therefore most desirable for a crop of Paddy in the succeeding season. Provided, of course, that the stumps of the Indigo are not left in the ground for a crop of seed, and that the ground is ploughed soon after the plant is cut. A cold weather crop of mustard seed is also thus insured. My answer refers to high lands in Jessore and Kishnaghur."

From G. R. CLARKE, Esq., Singitollah Factory, to J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta,—(dated Maldah, the 5th August 1864.)

YOUR Circular of the 19th July only reached me yesterday. The question at present between the Association and the Government has interested me much from natural inclination towards such subjects, and from my long connection with the

Bengal Indigo Company and residence in the Kishnaghur District extending over twelve years.

No Ryot understands the principle of a rotation of crops, but they perfectly know that the land will not produce the same crop for a series of years; that if so situated that no other crop will grow, or can be conveniently cultivated there, it must be allowed to remain fallow every fourth year but they have no system that one kind of crop should follow another, nor do they divide crops into different classes. I have often endeavored to explain to an intelligent Ryot that a purely green crop like peas cannot injure his land, because it takes nothing from it, the entire of its sustenance being drawn from the air through the leaf; that the insignificant little superficial root of the pea could never supply moisture enough to keep that great succulent plant alive, but I was naturally enough not believed; it was too much to expect, and required a training the Ryot has never had access to.

Indigo is not an exhausting crop. Ryots bent upon vilifying Indigo as a whole will, of course, say it is so, but we used to grow our finest Indigo in the high "beta" lands in the village where, as soon as it was cut, and the stalks cleared away, the lands were instantly, and without any manure, ploughed up and sown in mustard or tobacco, which they produced as fine and as prolific as if the land had lain fallow. It was the false unwise system of making the Ryot keep the stalks to grow seed, which drove the Ryots to cry out against the village cultivation, as he lost his cold weather crop, realized a mere trifle from the seed, which was generally nibbled off by the goats whilst the land was becoming exhausted for Indigo for want of the very change they were prevented from carrying out. The Ryots, at the Commission, admitted that Indigo required much less cultivation than their own crops. It cannot, therefore, be exhaustive, or it could never be produced with less cultivation than a non-exhaustive one; but the soil of Bengal is generally degenerating from want of artificial aid in the shape of manure; the proportion of cleaned Rice to husk in any given measure of Paddy is much less now than it was fifty years ago.

I never heard of a Planter who had actually tried the case, but I firmly believe that a crop of Rice grown on land which had been in Indigo the previous year would be quite as rich in quantity and quality as if the land had lain fallow.

From M. DUROU DE DOMBAT, Esq., Muddunderry Factory, to J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta,—(dated the 4th August 1864.)

I HAVE to acknowledge receipt of your letter, dated 19th July last, and to state in reply that, although I am not aware of any one having made experiments in India to test the theory of the European system of rotation of crops in farming, I can say from my own experience of upwards of twenty-five years in Bengal that the Ryots, so far from thinking that Indigo exhausts the soil, say on the contrary that the falling leaves of the plant act as manure, and consequently improve it considerably. It is a noted fact that, whenever Planters wish to get rid of a portion of their cultivation on account of jungle, &c., the Ryots eagerly offer to give in exchange their high Paddy lands, or pay an enhanced rent for it.

As a further proof of what I have stated above, I beg to bring to your notice that, since purchasing the Soojunpore Concern, in Kishnaghur, in 1852, I have regularly sown the Factory ground, about sixteen beegahs, with Indigo every year in October, and, according to the weather which followed, have reaped either a middling or a full crop annually without ever manuring these lands. This I am sure will be accepted as an additional proof that Indigo does *not* deteriorate the soil.

From J. HILLS, Esq., Neechindepore Factory, to J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta,—(dated the 8th August 1864.)

I AM favored with your letter of the 19th ultimo, requesting me to inform you, to the best of my knowledge, whether Indigo proved a more exhausting crop to the soil than others, and in reply have to state that my experience and careful enquiry go to prove that it has a contrary effect upon the soil.

The Ryots are not sufficiently advanced in civilization to understand the benefit arising from the theory of rotation of crops, and their system is to sow consecutively for four or five years the same piece of land with Rice and then give it for Indigo the year previous to their intention of laying it down in fallow. If, however, the lands within the above specified time, or before they are considered sufficiently exhausted by Rice are sown down with Indigo, then they are again prepared and sown with the Rice crop, and the Ryots always admit that the yield is more than had the crop been Rice in the previous year instead of Indigo. In the face of this it will naturally be asked why then does not the Ryot introduce the rotation of crops; the answer to this is, he does not weed and otherwise clean his Indigo crop as he does his Rice crop, and therefore, in the following season, there is more jungle, and consequently the expense, labour, and trouble of weeding and cleaning are greater, which, with the Ryot, in himself naturally lazy and indolent, is a sufficient bar to his carrying out the rotation system.

It is not, however, the two or three beegahs of land, or the trifle of advance, that affect the position of the Ryot; it is the comparative withdrawal of the large sums of money circulated by the Planter amongst them, as, though they perhaps do not receive by the advance 20 per cent. of the money outlayed, they nevertheless receive the whole by other ways. My Ryots are much poorer than they were five years ago, and the cause they assign for it is that they and their families do not now get the large sums of money from the Factories they formerly used to do.

From A. HILLS, Esq., Katcheckatta Factory, to J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta,—(dated the 29th July 1864.)

IN reply to your communication of the 19th instant, I beg to say that the Ryots in this part of the country have always been anxious to get our Neezabad Indigo lands in exchange for their Paddy ones, the simple reason for the same being the well-known and acknowledged fact by all people connected with agriculture in this District that the Rice crop on Indigo lands gives a much greater return than on lands which have previously been in Paddy. During this current season

in this Concern I have exchanged a considerable quantity of Neezabad Indigo for the Ryots' Paddy lands in villages too that are *be-elaka*, and in which I have little or no Indigo sown by the Ryots.

In my opinion Indigo is a far better preparation for Paddy than fallow lands; the latter require double the amount of cultivation before they can be sown, and much more weeding afterwards. On this head I may also add that when a Ryot takes Indigo land he can cultivate it during September and October, so as to be able to sow it with the most valuable of the cold weather crops, viz. Linseed, Mustard, Rye, Wheat, and Barley, whereas the cultivation of lands left fallow commences in June and July, and the ploughing is kept up constantly to the following spring, or else they are merely half prepared and sown in Kullie, which gives half the return of the other crops. I may here state in conclusion that it is quite a mistake about lands being kept fallow by the Ryots, they cultivate every inch of their "jumma" that they possibly can, and wherever there is a considerable quantity of fallow, the lands, in most cases here, are either "kas-kamar," "out-bundie," or "polotoca."

From R. HARVEY, Esq., Khāl Bolia Factory, to J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta,—(dated the 30th July 1861.)

IN reply to your letter of 19th instant, having reference to the question whether or not Indigo be found to be as good a preparation for Rice as leaving the ground fallowed, and whether it is generally considered by the Ryots an exhausting crop, I have to say that the result of my experience satisfies me that a superior Rice crop is to be obtained from land which has been cultivated the previous year in Indigo than can be from broken up or fallow land. The Ryots are quite alive to this fact, and will always plough up the previous year's Indigo land for their Rice crop in preference to breaking up a fallow. In the same way Rice land gives a much better crop of Indigo than a broken up fallow however well the latter may be ploughed. In fact the two crops are mutually beneficial to each other.

Since the receipt of your letter I have made various inquiries from Ryots and Natives of the upper classes on this subject, and they all concurred in expressing their belief in the advantages to be derived from a change in the land and rotation of crops. It is the extensive and constant cropping with Linseed that has deteriorated the fertility of the high lands of Kishnaghur within the last few years.

From R. F. STEVENS, Esq., Hazrapore Factory, to J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta,—(dated the 8th August 1864.)

IN reply to your Circular of the 19th July ultimo, I beg to observe from my long residence and knowledge in the Mofussil, connected with agricultural pursuits, that the Ryots greatly benefit from the rotation of crops. It is, however, only within the last few years that a few Ryots have become agreeable to the change of crops. The Ryots that I have had anything to do with have always been alive to the benefit they would derive from the change, but the bar or obstacle in their way was the little extra cultivation

required, as the Indigo lands are generally grassy; but of late, that is within the last three or four years, many Ryots are overcoming the above scruples, and asking for change of lands by giving their Paddy lands in exchange for our Indigo lands for the period of two and three years. Of course I refer to the highlands which are seldom or ever inundated. In this and the Porchatty Concern, in the present season, I made exchange with the Ryots for about 600 beegahs, many of them are people over whom I have no control, they being tenants of Baboo Ramrutton Roy and other Zemindars. Up to date I have had several applications from other Ryots to make the like exchange for the ensuing season. The Indigo lands which I gave up in exchange this year for Paddy cultivation have now got on the ground a much finer crop of "Auwoosh Paddy" than their neighbours. This, in my opinion, goes far to prove that the rotation of crops is beneficial both to the lands and cultivators.

I must certainly acknowledge that the highlands, consisting of light or alluvial soil, derive great benefit by being allowed to lay fallow for one or more years. The nature of the land being poor, it naturally requires time to re-gain strength, consequently the yield of the crops would be in proportion, which could not, by any chance, pay the cultivator. The clay or "mateal" lands do not require to lay waste, as the change or rotation of crops with good cultivation will always keep the lands fresh and thereby amply remunerate the cultivators.

From A. S. SAWERS, Esq., Culna Factory, to J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta,—(dated the 17th August 1864.)

IN reply to your Circular of 19th ultimo, relative to a rotation of crops and the effect of an Indigo crop on the soils of Bengal, and especially with reference to the necessity for a rotation on the high lands of Kishnaghur, I beg to say that I have already, at the request of the Agricultural and Horticultural Society, pretty fully addressed them on the subject with a view, I believe, of their communicating with Government, and therefore what I can now say must be very much a repetition of what I have already stated.

2. In an experience of over a quarter of a century I now learn, for the first time, that "Indigo exhausts the soil more than any other crop." I never met with any Ryots who ever made such an assertion, and, if it were true, I cannot believe that so large a portion of the October sowings of Indigo throughout Lower Bengal would be *mixed* with the cold weather crops of Kullie, Mustard, Rape, Linseed, Oats, and Wheat, which we yearly see, for if Indigo required for its full development to monopolize the whole nutritive qualities of the soil, no Planter would ever allow another crop to be sown with it, but such is the fact. We many years see good returns, in the months of March and April, reaped of the above winter crops, and, in the months of June and July following, a fine crop of Indigo as well from the same lands and sown at the same time. Linseed I consider to be the most exhausting cold weather crop we have (except perhaps hemp,) and for this reason, as a general rule, I never allow it to be sown with my Indigo. At the same time I have over and

over again seen most excellent Linseed and Indigo crops reaped from the same piece of land which could scarcely be the case if *both* required the full nourishment of the soil.

3. As to a rotation of crops theoretically the Bengal Ryot knows nothing about it, and in sowing his lands *in succession* to a Rice crop, he generally looks to the prices the winter crops of the *previous* year have been realizing, and, without any consideration of the principles of supply and demand, sows the articles of highest *existing value*, provided, of course, it be suited to the particular *quality* of his soil, of which every Ryot has a thorough *practical* knowledge; but no one knows better than the Ryot the value of a *rest* to his land. In the Districts of Hooghly and Burdwan *manuring* on a modified system is adopted; in fact, Sugarcane and Potatoes being now very extensively grown in those Districts, manure is *absolutely necessary*, and any lands lying fallow in those Districts is generally from some other reason than as a rest.

But in the District of Kishnaghur, where manuring exists on a very homœopathic principle, a periodical *rest* is necessary, and in my experience of that District, extending over ten years, but before the Indigo disturbances, I always found the Ryots to prefer an Indigo crop *as rest* to fallow, because, as I have stated above, they *know* Indigo to be *unexhausting*, and the labour and expense of weeding their Rice after the Indigo would be much less than if the land had lain fallow.

From J. FORLONG, Esq., to J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta,—(No. 898, dated Durbhungah, the 20th September 1864.)

Your letter, dated the 19th July, has been with me for sometime, but the pressure of important duties has prevented my attending to it, and for which, I trust, you will excuse me.

I beg now to say that I quite agree with you in the correctness of the principle for which you have contended in the 1st paragraph of your letter, and though Agricultural science may not have advanced so far as to make the Bengal Ryots fully aware of its value, still they know well enough the advantage of a rotation of crops, and I am certain that no crop will rotate so well with Rice as Indigo will do; and when the present angry feelings calm down a little the Ryots will soon discover this, and also see that an Indigo crop grown on the more liberal system now prevailing in Bengal, and especially in Kishnaghur, will most unquestionably remunerate the cultivator better than a Rice one will ever do; in truth the Rice crop gathered in Kishnaghur in August is about the most unprofitable crop the Ryot can grow, and it is generally regarded as the Mohajan's crop, who will neither act as banker for the Ryot, nor supply the wants of his family, unless a certain quantity of his land is given up for this sort of Rice. The Rice crop again, gathered in December and January, called the *winter Rice*, gives an excellent return to the Ryot, and is about the best crop he can grow. With reference to the 1st paragraph of your letter I may say that I think an Indigo crop as a preparation for a Rice crop would be quite as useful, or probably more so, than allowing the land to remain fallow. Here it is not often Indigo lands are given up, but when they are so, there is the most

eager competition to get them for other crops, and the Ryots even prefer them to lands that have been fallow.

It is quite a mistake to think that Indigo is an exhausting crop, as the soil for it is carefully prepared, the crop is rapidly grown, carefully weeded, quickly cut, and besides, the decayed leaves and stubble, rotting, or being ploughed into the soil throw great fertilising power into it. In this District I notice that on all lands, not very distant from the Factories, a thin layer of the Indigo stalks, after being taken from the vats, is scattered over the fields, as it is found to be the best manure that can possibly be used, and a little of it put in a garden has a wonderful effect.

In this District I have been much surprised to find that a great deal of land, not to be compared with the land in Kishnaghur, has been cultivated with Indigo without the break of one season for twenty, and even thirty years. This I acknowledge, from what I had seen in Bengal, quite astonished me; but I found the land for Indigo was, as a rule, always kept for it, and no other crop ever allowed to be grown upon it, leaving it, at any rate, for six months in the year, not fallow, but cultivated like a garden, for the crop requiring the other six months. Still even with this advantage, and as a rule without manure or inundation, if the crop was of an exhausting character, it would be nonsense to say that the lands would yield really two rich crops during six months of each season for twenty years running; in saying two crops I refer to the first and second cuttings of the Indigo crop, and the second cutting is often as rich as the first. Of course you are aware that the Planters here for the spring sowings do not depend on early rains, for of them they are really quite independent, the lands for the Indigo crop having been so carefully prepared and rolled so as to keep the moisture of the previous rains in, that Indigo sowings commence in February without reference to any shower that may fall. None of the neighbouring Districts, however, admit of preparation of Indigo lands in the same manner, and I suppose the reason for the land's retaining its moisture here, by the most careful cultivation and afterwards rolling, is owing greatly to the Saltpetre character of the soil.

In Bengal a Ryot has a fine cold weather crop from his land, which he gives up for Indigo in March, cultivates it rapidly, sows it in April or May according to showers, and the land is again his in the end of August. From what I have said above you will see the system here is very different, and I must say that any system of planting I have ever seen in Bengal was quite as liberal as anything I have ever seen here, and I would beg your best attention, and also that of others interested in the business, to this unquestionable fact, and as to why all should be confusion and ruin to Planters in Bengal, and peace, quietness, and great prosperity to the Planters in Tirhoot.

From MESSRS. ERSKINE & Co., Elambazar Factory, to J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta,—(No. 165, dated the 1st August 1864.)

With reference to your letter, dated 12th July 1864, we are of opinion that in our Districts, *viz.* Burdwan, Beerbhoom, and Bancoorah, an Indigo crop is not considered by the Ryots to be an exhaustive one. On clearing land from jungle the Ryots invariably prefer sowing Indigo, mixed

with *Kisto Teel*, Mustard, Peas, Gram, &c. A seed crop is allowed to grow only on lands of small value, and then the Ryots prefer to let the lands lie fallow from December or January till the following rains; this has reference to the higher lands not subject to inundation.

In our better cultivated lands our chief sowings are in sugarcane lands, sown immediately after the cane has been cut. If the cane has been cut early in the season most of the Ryots prefer an Indigo crop, as that can be cut in time for a Rice crop; but if the cane has been cut late, or the water for irrigation fails, the Ryots prefer sowing *Ouse Dhan*, but they always declare that the crop succeeding the Indigo is better than that succeeding the *Ouse Dhan*.

We may mention that in scarcely any instance in the Districts beforementioned (at least in our cultivation) is Indigo the only crop on the ground; the October sowings are mixed with Mustard, Oats, Gram, and other cold weather crops; the spring sowings with Teel.

From W. B. BALDWIN, Esq., Soobunkally Factory, to J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta,—(dated the 3rd August 1864.)

In reply to your letter of the 19th ultimo, I have to state that the result of my observation and experience has invariably shown that so far from Indigo exhausting the land upon which it is grown it has a direct contrary tendency.

In the Soobunkally Concern I held lands that have been annually sown with Indigo for thirty years, the last ten of which they had got beyond the influence of the yearly inundation, and therefore the return was unprofitable. Upon which I gave up the lands to the Zemindar, who, at the earnest entreaty of the Ryots, gave them into their charge, receiving a Rupee per beegah present for the gift. Upon the land in question the various crops the Ryots raised were most abundant, clearly showing that Indigo is anything but an exhausting crop.

Here you have an instance within my own knowledge of the fact of lands having been cultivated with Indigo for thirty years, and the lands when given up yielding magnificent crops of various kinds.

From J. P. WISE, Esq., to J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta,—(dated the 11th August 1864.)

I SEND you Hampton's opinion about *Fallow*. His experience is better than mine, as he has been in parts of the country where it is more resorted to than here; where the annual floods enrich the greater part of the lands fit for cultivation.

In the low rich land affected by the inundation the Ryots go on year after year sowing their crops without experiencing any great deterioration of the crops. On the higher lands, depending on the elevation and nature of the soil, and where not enriched by annual deposits, the Ryot merely extracts what he can without returning anything to it in the way of manure, and consequently the soil becomes exhausted, forcing them at intervals to let the land remain fallow for one or more years according to the nature of the soil. Changing the crop to Indigo, however, they find in many cases to answer the same purpose, partly no

doubt from the Indigo not being an exhausting crop, and partly from that crop extracting different chemical ingredients from the soil. Whatever may be the cause the result is found to answer, and it is a very common practice here for the Ryots to ask for an exchange of land, taking what has been in Indigo, and giving up their Paddy lands that have been giving them a poor return, and this exchange is beneficial to both sides. Large portions of my cultivation is thus exchanged, and a good deal of the Neezabad land in Indigo is given up to the Ryots to take a winter crop on agreements to sow Indigo in spring.

I have been seriously thinking of withdrawing from Indigo, but it is also a serious question for the Ryots whether or not they would be benefited by the withdrawing of so much ready money spread annually amongst the very poorest of them. Greedily taking advances and then being compelled to work is to them a serious evil, and what the Ryot wants is to get the Planter's money to give as little or no return if possible, and to pay a very small rent for his land. An Income, a Road, and Dawk Tax is beyond the reach of his comprehension. He is, however, well up in Act XLIV., in Act X., and brings to your notice Act VI. of 1862 with a smiling countenance.

From J. P. HAMPTON, Esq., Doorianuggur Factory, to J. P. WISE, Esq.,—(dated the 2nd August 1864.)

Your letter, dated 29th ultimo, together with its enclosure, from Beckwith, to your address, I received last evening, and in reply I have to state:—

1st.—From an experience of seven and twenty years obtained in the Districts of Oude, Moorshedabad, Jessore, Kishnaghur, Baraset, Furreedpore, and Mymensingh, I am of opinion that an Indigo crop does not exhaust the soil for the grain crop which is to follow it.

2nd.—I have observed that in every District in which I have been located, where there was not an over-abundance of land as in Oude, the Ryots have sought in preference land on which Indigo has been grown, and have given me in exchange Rice (dry) "*fall*," or cultivated land for it.

3rd.—In some Concerns of which I have had the management, 'Patkabarrie' for instance, in the Moorshedabad District, I used to endeavor to obtain as large "*chucks*" of land as I possibly could for Neezabad cultivation, and adjoining the Ryot's Rice lands, which I used to exchange yearly beegah for beegah, I taking the Rice lands for Indigo, and the Ryots taking the Indigo lands for a grain crop. On these lands they first grew a cold weather crop, such as Wheat, Barley, Oats, Mustard, Linseed, &c., and then Rice, thus obtaining two crops, and I never saw more luxuriant ones anywhere from the land on which Indigo had been previously grown. This, I think, is a pretty good proof that Indigo does not exhaust the soil for the grain crop which is to follow it.

4th.—In the Baraset District, where tobacco is very extensively grown, the Ryots prefer Indigo land to grow a crop of tobacco than turning up fallow land for it. If the Ryots were not aware that the soil on which Indigo had been grown was enriched by the leaves that fall from the plant, why should they choose the land in preference to fallow

From F. COLLINGRIDGE, Esq., Doudpore Factory, to J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta,—(dated the 12th August 1864.)

I beg to acknowledge the receipt of your Circular of the 19th ultimo.

In answer to your query respecting my opinion as to whether Indigo is or is not an exhausting crop in its nature with reference to its being followed by grain crops, I beg to state that I consider Indigo does not exhaust the land at all as respects grain crops, but quite the reverse.

I have yearly experience of the correctness of this opinion, as I give up lands that have been exhausted (by Indigo) for Indigo purposes to the Assamies to be sown in grain crops, and invariably find that such crops are in no way inferior to grain crops sown in lands of similar strength which have not been in Indigo at all, but on the contrary often find that the Indigo-land grain crop is the best of the two. The eagerness with which the Assamies take up any Zeraut lands that I may wish to give up for a grain crop proves that they hold the same opinion on this point that I do.

These remarks are made in reference to the highlands of Tirhoot, which are never inundated, and which, I presume, correspond in great measure with the highlands of Kishnaghur.

Apologising for the delay in answering your letter, I remain, &c.

From J. J. GREY, Esq., Goamultee Factory, to J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta,—(dated the 11th August 1864.)

In reply to your Circular of 19th July, asking how far of my own knowledge Indigo is found to be as good a preparation for Rice crops as leaving the land uncultivated or fallow, I beg to state that having no *Nizabad* cultivation, and as almost all our Indigo lands are subject to inundation, my experience is limited. But this I can confidently state that, upon giving up Indigo lands on the high tracts of country to the Ryots for Rice crops, they invariably get a heavier return from those lands than from their ordinary Rice lands.

Having questioned many of the most intelligent Ryots on the subject, they say that Indigo is a good crop for their lands, and far from being exhausting, that on the contrary the ripe leaves falling on the ground fertilizes the soil; but they at the same are quite aware that the Indigo must not be allowed to ripen its seeds, otherwise very little attention is paid to rotation of crops by them.

My own experience shows me that October sown Indigo does exhaust the soil, as the flower forms, and seed ripens generally before the plant is out; but Indigo sown in February, or with rain in the spring months, has no such effect, and Rice sown on old Indigo land is better, and yields a larger return than it would if otherwise treated.

From T. E. OMAR, Esq., Borroy Factory, to J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta,—(dated the 4th August 1864.)

I have been duly favored with your communication of the 19th ultimo, and in reply beg to state that, during my residence in the Districts

of Jessore and Kishnaghur, a period of twenty-four years, I can, from actual experience, confidently assert so far from Indigo being an exhausting crop, that, before the outbreak among the Ryots in 1860 occurred, it was an habitual thing in both Districts to exchange tracts of Indigo land for Paddy land, from which both Planter and Ryot benefitted.

It is a well known fact in the Mofussil that "Kheel Murrah," the term used for either Indigo or fallow land, taken up for Paddy, yields for three consecutive years, in excess of Godustah Paddy land, a profit of 50, 40, and 30 per cent. respectively, and Government is sadly in error when pronouncing the opinion that Indigo exhausts the soil.

Allow any disinterested persons to visit these Districts and institute inquiries with reference to the question at issue from the labouring classes, and they will soon be able to convince Government that they have been wilfully misled by designing or ignorant parties.

In Kishnaghur, where inundation is seldom felt, without an exchange of land no crop worth the name can be raised, and if this could be effected every year between Indigo and Paddy, it would prove a positive advantage to those concerned.

The Indigo lands in that District are as highly cultivated as those for Paddy, and the Ryots could offer no objections on the score of extra labour, accruing from the exchange, whereas in Jessore, the cultivation being lighter, and jungle grasses abundant, they might have some reason to grumble if they considered it a hardship to make the exchange.

The cultivation of sugarcane requires enormous labour, (which no Ryot would throw away needlessly,) but the lands, on which this crop is reared, are, in nine cases out of ten, high patches on which Indigo has been grown for years and made over to the Ryot at his own request.

He sows Paddy for the first two years to thoroughly eradicate the grass, when he plants out his cane and after cutting and disposing of it he has no further use for the land, and it reverts again to the Planter, who gives him another "chuck" of his Indigo land, and this rotation system has been followed with great advantage to both parties in Baliacandy and other Concerns (where Sugarcane cultivation is understood and appreciated by the Ryot) for very many years.

The profit on a beegah of Sugarcane varies from Rupees twenty-five to fifty after deducting all expenses.

After perusing the recent correspondence in the *Government Gazette* in relation to this and other questions, I am induced to offer a few suggestions which, I trust, will neither be considered irrelevant or out of place.

In the first place, then, I am convinced the six bundle system will never pay the Ryot, (view it in any light,) and if a Concern cannot afford to work with the rate of four bundles, the Ryot should be most certainly released from his contract. I consider a Planter has every right to demand the full Pergunnah "Neerick" from those Ryots who refuse to sow Indigo upon fair and equitable terms, and if the Government attempt to legislate on this point, they will make confusion worse confounded and draw odium upon themselves.

We see Native Zemindars, who are also Indigo Planters, every day suing for and obtaining decrees

under Act X. at this Neerick; besides COAXING their Ryots, (don't mistake me) to continue the cultivation of Indigo at *unremunerative prices*, and surely the European, who foregoes Indigo and remains satisfied with the rent he is entitled to by law, is more deserving of protection than the Native who exacts both.

This question has been put to his Ryots by more than one European, will you sow a reasonable quantity of land in Indigo, or pay the full Neerick? And the answer invariably was, keep our jummas at the original rates and we shall be only too happy to sow Indigo, *due consideration* being paid to the number of our cattle, ploughs, and means, and what *fair-dealing* Englishman would burden a Ryot with more than he could bear.

Let Government judge impartially and punish offenders—whether Planters or Ryots—who transgress the law, but refrain from visiting with their displeasure those of the former, who are honestly and fairly paying their way, upon the bare suspicion that if a few have failed to treat their Ryots well, the entire body are guilty and must come under their ban.

Let Proprietors summarily dismiss those Managers who are guilty of oppression, and make careful selections in their stead if they value their own interest.

When Proprietors, who are their own Managers, have recourse to illegal measures, let Government step in and warn them in the first instance should there be ample evidence and well supported to prove that injustice exists, and if this is not sufficient to deter them from altering their policy let them be prosecuted with the utmost rigor of the law.

Let Government warn the Editors of Native Newspapers from making sweeping charges against the entire Planting interest, confining themselves to well-founded criticisms upon the acts of those who alone deserve blame.

The tone now prevalent in the *Hindu Patriot* and other Native periodicals leads to only inflaming the minds of the ignorant masses of their countrymen, exasperating the parties who are unjustly aspersed, and bringing themselves into contempt as unscrupulous partizans before a discerning public.

P. S.—I may just as well mention that a report has been prevalent among the Ryots in this quarter for some days past that orders have emanated from Her Most Gracious Majesty that the standing crop of Indigo shall be manufactured within fifteen days, and if Planters are unequal to the task, whatever remains is to be cut away and flung into the water. It is the duty of Government to take official notice of such gross falsehoods, (the officials are not ignorant of these reports,) for without such a check matters will drift gradually into the channel our enemies desire, and pave the way for fresh disturbances.

From A. S. UNQUHART, Esq., Poopree Factory, to J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta,—(dated the 23rd August 1864.)

WITH reference to your printed Circular of the 19th July, respecting a correspondence between yourselves and the Government as regards the Indigo crop being a very exhausting crop to the land upon which it is sown, and calling upon us to furnish you with any statement that we may have gleaned from actual

experience, I would beg to make the following assertion:—

1st.—Having been ten years connected with Indigo I can most certainly, from personal experience, state that Indigo, inasmuch as the growth of the plant *itself* is concerned, I most certainly consider that it exhausts the strength of the soil to a very great extent, and after three or four years that plant in the same land will never give a good return, and in many instances the land has, in three or four years, been so exhausted that it becomes incapable of supplying sufficient nourishment to the plant to enable it to come to maturity, and though the seed in these lands is sure to germinate, yet it seldom grows beyond two feet, and the leaf has a most withered appearance.

2nd.—Taking the Indigo as a rotation crop, I have no doubt about it that it has, for any other succeeding crop, a most beneficial effect upon the soil, for, from personal experience, I can certify that *any other crop* sown upon lands that have been in Indigo and given up to the Ryot when it has become exhausted for that crop gives a far greater return to the Ryot, and the crops in these fields have a much more luxuriant appearance than the generality of the same description of land which has not been in Indigo previously.

From J. S. SMITH, Esq., Tadjpore Factory, to J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta,—(dated the 30th July 1864.)

In answer to the question regarding the soil exhausting properties of Indigo, and the benefit or otherwise that grain crops derive in rotation with Indigo, my experience (of twenty years) is that Indigo only exhausts the soil of the properties required to sustain itself inasmuch as it deteriorates if yearly sown in the same soil without manure; also that a grain crop is better after Indigo grown for manufacture if sown in due season without manure, and with the usual cultivation, than after any other crop that I know of.

A grain crop is better after a season's fallow than immediately after Indigo, provided the lands are kept "Choumos" (as in Tirhoot) that is, kept thoroughly ploughed, cultivated, and free from weeds, but if allowed to go to grass, a grain crop, after a season's fallow, is not so good as that sown in due season after Indigo.

From J. F. CURRIE, Esq., Ramcoallah Factory, to J. BECKWITH, Esq., Secretary to the Landholders' and Commercial Association, Calcutta,—(dated the 2nd August 1864.)

I HAVE duly received your Circular of 19th ultimo, regarding the rotation of crops, but as it does not apply to lands in my neighbourhood, I fear that I can give you no information on the subject. But a small portion of lands are sown in Rice in this part of Sarun, and in these Indigo is never grown. The Rice lands are all in the Chowrs, which fill up during the rains, and I never heard of any of them being left fallow when there is opportunity to sow them, which there always is, unless the rains are particularly mild. Regretting that I cannot afford you more information, I remain, &c.

From the Hon'ble A. BARN, Secretary to the Government of Bengal, to the Secretary to the Landholders' and Commercial Association,—(No. 4761, dated the 19th November 1864.)

I AM desired to acknowledge the receipt of your letter, dated 23rd September, enclosing the replies

sent by a large number of gentlemen engaged in the manufacture of Indigo to a Circular addressed to them by the Association on the subject of the advantage of the cultivation of Indigo as a rotation crop.

2 It is important to bear in mind the origin and course of the correspondence on this subject between the Government and the Association.

3. From the Report of the Magistrate of Nuddea on the violent assault committed last February by the Ryots of certain villages upon the servants and coolies of the Bagadangah Factory, belonging to the Bengal Indigo Company, it appeared that the hostile feeling which led to the attack was owing chiefly to the proceedings of the Company in reducing the price paid to the Ryots for Indigo from 4 annas to 2½ annas the bundle, and that the cultivation of Indigo at this latter rate, which was assumed on good grounds to be unprofitable, was forced on the cultivators by a threat of enhancing their rents.

4. On this the Lieutenant-Governor took occasion to remark that it could not be for the advantage of the Planter to persevere in measures tending to produce such a feeling, or be commercially profitable to compel Ryots to engage in a losing business by threatening them with the enforcement of a legal claim of a totally different kind. The Lieutenant-Governor expressed his conviction that the Government should look to the exercise of good faith and moderation on the part of the Planters, and to the maintenance by them of a watchful control over their subordinate agents, rather than to further legislation for the prevention of discontent on the part of the Ryots; and he suggested that it would be better if the Planters were to enhance their rents separately and independently of their Indigo transactions, and at the same time enable the Ryots to cultivate Indigo for them on fair terms rather than to compel the Ryots to cultivate on terms which were not fair by threatening to enforce the right of enhancement.

5. The reply of the Association to this suggestion was that a Rupee for six bundles, or 2½ annas a bundle, is not an unprofitable price for the Ryot, because Indigo is a green crop which takes the place of a fallow every fourth year like the Clover crop in England, and that it would be as reasonable to say that Clover is an unremunerative crop because it is less valuable than Wheat as to say that Indigo is an unprofitable crop because it is of less value than Rice. It was admitted by the Association that the Ryots themselves are probably unaware of the manner in which they profit by growing Indigo, and that many of the Planters are scarcely better informed, but that in point of fact Indigo, regarded as a substitute for fallow, might be a profitable crop to the Ryots even at six bundles to the Rupee.

6. The Association entirely agreed with the Government that it would be better in all respects that the Planter should exercise his right to enhance rents separately and independently of his Indigo transactions, and they thought it so clearly to the advantage of the Planter to do this that they could only attribute the two being mixed up together to the delay, litigation, and expense attending enhancement.

7. The Association then went on to say that what is wanted is, that the Officers of Govern-

ment to whom the Ryots look for advice should explain to them the benefit of observing a systematic rotation of crops, and should show them that Indigo grown in proper proportion and in due rotation would come in the place of the fallow and would be an addition to the general returns from their holding," and that the Association should impress upon the Planters the propriety of observing, and inducing their Ryots to observe, a proper rotation of crops.

8. In my letter, in reply, No. 513, dated 4th June, the Lieutenant-Governor, admitting the subject of the rotation of crops to be one of great interest, expressed an opinion that it had very little to do in practice with the disputes between the manufacturers and cultivators, and pointed out the great objection which existed to any attempt on the part of Government to interfere in the manner proposed. The Lieutenant-Governor was of opinion that "the Bengal Ryot was not slow to learn what is and what is not profitable to him," and that any attempt to teach him this through Government agency would give rise to very great abuse.

9. In the replies to your Circular which you now forward there is one argument which is used by every one of the gentlemen consulted with one exception, and that is, that the best proof that Indigo must be an advantageous crop to sow as a rotation crop is the readiness with which this view is adopted by the Ryots generally, and the eagerness with which they endeavour to carry it into practice by exchanging their Rice lands with the Indigo lands.

10. It is clear from this that the intervention of Government for the purpose of explaining this theory to the Ryots is not wanted by the Indigo manufacturers; they all declare their Ryots to be thoroughly aware of the advantage of Indigo cultivation as an improving crop, and if they are correct in this, it is obvious that it is not ignorance of the principles of agriculture which makes the Ryot so unwilling to cultivate Indigo.

11. The Lieutenant-Governor is still disposed to think that the real point at issue is to be found in the reply of Mr. Oman, who says that he is "convinced the six bundles system will never pay the Ryot, (view it in any light,) and if a Concern cannot afford to work with the rate of four bundles the Ryot should be most certainly released from his contract." There can be no doubt that the question is one of price, and of price alone, and it must at once occur to the gentlemen who replied to your Circular that the Ryots who are sufficiently intelligent to understand the advantage of a rotation of crops are sufficiently intelligent to understand what crop is and what is not a remunerative one, and that their desire for the accumulation of wealth is sufficient to make them ready enough to undertake a remunerative cultivation.

12. The Lieutenant-Governor will only add, in reference to your letter of the 14th April, that now that the law as to the right of enhancing rents has been in a measure settled, and that forgery will be prevented by the new Registration Act, it may be expected that the Planters will, as a rule, be able to realize fair and equitable rents from their Ryots without recourse to legal proceedings in the Courts. In that case the only bar to the complete separation of Indigo and Rent transactions will have been removed.



SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, DECEMBER 7, 1864.

OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE will henceforward be published, containing such Official Papers and Information as the Government of Bengal may deem to be of interest to the Public, and such as may usefully be made known.

Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on a payment of six Rupees per annum if delivered in Calcutta, or twelve Rupees if sent by Post.

No Official Orders or Notifications, the publication of which in the GAZETTE is required by Law, or which it has been customary to publish in the GAZETTE, will be included in the SUPPLEMENT. For such Orders and Notifications the body of the GAZETTE must be looked to as heretofore.

Instructions issued to Public Officers regarding the preparation of Stationery Indents.

Circular issued by the Officiating Superintendent of
Stationery.

I HAVE the honor to request your particular attention to the following instructions with regard to the preparation of Stationery Indents drawn up in accordance with the Report of the Stationery Committee which was published in the Supplement to the *Calcutta Gazette* of 24th August 1864, and approved of by the Government of India:—

2. These instructions have received the sanction of the Board of Revenue.

3. You will observe from the form of Indent herewith sent, and which is to supersede the form hitherto in use, that all Mofussil Offices are henceforth limited to the use of four kinds of paper, *viz.* writing paper, *i. e.*, English foolscap (machine-made and of good quality); two sizes of draft paper, which will be English printing paper; and note paper, which latter is for the use of Officers only in contradistinction to clerks.

4. It will not be necessary, in sending in your first Indent under these rules, to fill up this memorandum for the whole year, six months or three months will be sufficient as a guide; but it is strongly recommended that from receipt of this Circular a distinct account be kept of the consumption of Stationery. One of your head clerks should be appointed to keep this account, to take charge of the Stationery, to draw up the Indent, &c., (as is probably the case,) but the subject is fully deserving of frequent personal supervision, as the matter of Stationery is one of those

in which a little attention to details, however petty they may seem, tends to produce a considerable saving to the State.

5. Foolscap draft paper will be given at the rate of twice as much as writing paper, unless more is required for any special object which should be distinctly stated. If royal paper is indented for, the reason must be given. Blotting paper at the rate of 9 sheets per man per annum, which may be given in pads if required. Articles not specially mentioned in the Indent List, will be indented for under the head "miscellaneous," and the cause of the requisition stated.

6. Envelopes should be indented for of foolscap and note sizes. The memorandum at the head of the Indent will of course check the expenditure of envelopes as well as of paper. Until, however, envelopes are received from England, it will be necessary to have them made by the Duffries as hitherto.

7. With regard to docket slips, paragraph 28 of the Report, which has been approved of by the Governor General in Council, runs as follows:—"A large proportion of the correspondence of Mofussil Offices, as for example, letters stating a single fact, or asking a single question, might be expressed, in memorandum form, in docket slips of one-fourth or one-eighth of a sheet of foolscap paper." Communications between Commissioners and Collectors, and between Magistrates and District Officers, could likewise, in many cases, be compressed in small docket slips, the latter being provided by the Stationery Office. "Docket slips," "Reversible Envelopes" and "Indent forms" will be indented for on the "Form" Indent. For petty correspondence with any Office with which you are in frequent communication your attention is requested to the Reversible Envelope employed by the Civil Pay Master, of which a specimen is appended to this Circular.

8. With your first Annual Indent you will be good enough to submit a detailed statement of all the books kept in your Office; the size, kind of paper, &c., of each; and the period for which each book is expected to serve. Very considerable saving may be effected in this direction; and your attention is particularly directed to paragraph 30 of the Report, which states: "The general use of the bundle system would cause a reduction in the expenses of binding, and it is by far the most convenient form of keeping records. English bound books are largely indented for. We see no necessity for their being all made of expensive paper, and in so many varieties of sizes. Nearly all, if not all, the royal and medium books could be exchanged for books of foolscap size. The Bengal Registers of deposits, for example, are on books of royal paper, costing each 6 or 7 Rupees. They might as well be kept on printed forms of good printing double foolscap paper made up into books in the Stationery Office. Books of hand laid papers are likewise used for copying pension bills, pay abstracts, and the like; by the substitution of a register, entries extending over a page could be compressed into a line."

9. The two last pages of the indent form are intended for form Indents, which will be supplied (to those Officers who receive their forms from Calcutta) simultaneously with store Indents. When all the forms employed shall have been reduced to authorized numerical series, the Indent will contain merely the serial number of the forms and the number of copies of each form required, as may be now done in the case of codified forms like those of the Board of Revenue. In other cases the size and quality of paper must be specified.

10. For Returns and figured Statements printed forms should in all cases be used, and where they are not used you will be good enough to communicate at once with the Office by whose authority such Statements are made with a view to the drawing up of suitable forms. Even if the return be made on your own authority you should obtain the sanction of the Head of your Department to the employment of a printed form; and on no account should forms be indented for without sanction, as it is obvious that if the form is one likely to be used in other Offices as well as your own (of which a central authority is alone judge) the use of a uniform form in all such Offices will be far more economical than the present system in which each Officer indents for himself.

11. It is requested that every Indent may be accompanied by a distinct specification of the route and method of carriage by which the goods are to be sent: a space is left for this in the Indent form.

12. The appended Rules relate to the period at which the annual Indent is to be made, and are applicable to all Offices, whether in the Presidency or the Mofussil.

13. It is particularly requested that Officers in doubt about, or objecting to, any of those arrangements, will communicate with me (semi-officially) on the subject, as it is expedient that the system should be fully understood at starting.

Rules in accordance with paragraph 25 of Stationery Report.

1. OFFICES which are supplied with Stationery are divided into twelve classes. Each Officer will send his annual Indent for Stationery so as to reach the Superintendent by the first day of the month named in the list—

January.—Punjab Provinces:—Division beyond the Sutlej.

February.—Umballa, Delhi, and Jhansee Divisions and Rajpootana,

March.—Rohilkund, Agra, and Meerut Divisions.

April.—Allahabad Division.

May.—Benares Division and Oude.

June.—Patna, Bhaugulpore, and Rajshahye Divisions.

July.—Nuddea, Dacca, and Assam Divisions.

August.—Calcutta Offices, viz. those belonging to the Judicial, Revenue, Financial, Public Works, Telegraph, and Post Office Departments.

September.—Calcutta Offices, viz. the Secretariat Offices and those belonging to the Military, Ecclesiastical, and Marine Departments, and all not included in the above.

October.—Burmah, Straits Settlements, Tenasserim, Arracan, and the Chittagong Divisions.

November.—Central Provinces.

December.—Divisions of Burdwan, Chota Nagpore, and Cuttack.

2. The Indents received by the first day of the month will be supplied in the course of the month, and should be calculated to come into use on the first of the next month but one to that in the list. For example, an Officer at Peshawur will draw up and post his Indent so as to reach the Superintendent on or before 1st January. The stores will be packed and dispatched in all January, and the use of the new stores will commence on 1st March.

3. Emergent Indents must be accompanied by the most ample explanation. Requirements can very seldom not be foreseen.

4. Officers will commence the new system as soon as the proper month comes round. For instance, an Officer at Peshawur, who may have received in August 1864 a supply calculated for a year, will nevertheless send in an Indent by 1st of January 1865, reducing the year's requirements by the amount likely to be in balance on 1st March, and stating that he has done so.

5. Similarly Officers requiring supplies before their month comes round must send Indents for the short period. An Allahabad Officer requiring a supply in November 1864 will indent for Stationery sufficient to last him till 1st June 1865, and indent in March for the regular annual supply.

W. L. HESLEY,
Offg. Supdt. of Stationery.

Note.—It has not been thought necessary to publish the forms above referred to, for which application should be made to the Superintendent of Stationery in the respective Offices.

Report on the effects of the late Cyclone in Districts of the Burdwan Division.

From C. F. MONTRESOR, Esq., Commissioner of the Burdwan Division, to the Secretary to the Government of Bengal,—(No. 160, dated the 6th November 1864.)

WITH reference to your letter No. 4134, dated the 11th ultimo, I have the honor to submit a report on the effects of the storm of the 5th ultimo in the Districts comprising my Division. Some delay has occurred owing to delay on the part of some of the local Officers in sending in their reports, that of the Magistrate of Midnapore having been received as late as yesterday, and that of Howrah not having yet come to hand.

2. As Mr. Junior Secretary Bayley's Memorandum No. 4528 of the 27th October, this day received, indicates that the Magistrate of Howrah has been in direct communication with the Government, I deem it altogether unnecessary to postpone my reply until the receipt by me of that Officer's report of the injury found to exist in the interior of his District, and will commence by alluding to the several Districts in succession, taking first the District most southern, where the storm was felt the most severely.

3. The direction of the storm and the time it commenced and the reading of the Barometer in several quarters have already been reported to Government by other Officers of Government, my report therefore will be confined solely to the effects of the gale as far as they have been made known and collected up to date.

4. MIDNAPORE.—This District, as was to be expected from its exposed situation, has suffered most from the storm, not only from the tremendous force of the wind, but also from the sudden and unusual incursion of the sea, commonly known as the storm wave, which submerged the sea coast, deluged the country for several miles, and swept away houses, men, and cattle. The accounts from the District shew that the loss of human life has been very great. In some parts the loss was estimated at three-fourths, in others at five-eighths of the population; but these statements must be received with much caution, as we have as yet no means of testing their accuracy. Apart from the innate tendency of Natives to exaggeration, the Landholders believe it to be their interest to magnify their losses. The Magistrate, Mr. Smith, however, writing from the Tumlook quarter shortly after the gale, reports "that the storm wave rose over the embankments, and the loss of lives—both of men and animals—has been extreme, the living being unable to dispose of the dead." The crops, he likewise states, have been apparently considerably injured in the Pergunnahs near the sea coast.

5. PANNA.—The Salt Golahs at Narainpore have been materially injured; the tidal wave rushed over the embankments, and, owing to this, as well as to the rain which fell during the storm, "the stock of Salt" has been greatly reduced, according to the Superintendent's estimate, from two lacs to seventy-five thousand maunds, the Government loss thereby in cost of manufacture being about a lac of Rupees.

6. In Tumlook the Bazar is said to be a mass of ruins. The Deputy Collector's Cutcherry and house have been unroofed and rendered uninhabitable. The School and Hospital have been injured in a similar way. In Mysadul the

crops in the interior had suffered. The reports of the Executive Engineers to their own Department, as promised by the Superintending Engineer, Presidency Circle, in his letter No. 2971 of 19th October, to the Chief Engineer, will afford accurate information regarding the state of the embankments; but on a rough estimate, about one-fourth to one-third of the earth-works have been destroyed, and some of the sluices have been injured or thrown down.

7. The Russoolpore Golahs are reported as destroyed, but there has been no material loss of Salt. The embankments from thence to Kedgerree have suffered seriously. There are several breaches, and the line of embankments have been greatly injured. At Cowcolly Light House the water-line traced on the plaster of the wall was found by the Executive Engineer to be thirteen feet from the ground, *i. e.*, six feet four inches above the crest of the Hooghly Dyke. It was at Kedgerree that the Post-Master and Honorary Magistrate, Mr. Botelho, perished with his family. The house is reported as having been entirely washed away. The Telegraph Office is seriously injured. The village itself and the Police Station have been washed away. The Police deserted their posts after the inundation had subsided, leaving the country, where their presence was most required. None of the records have been recovered.

8. The crops have been injured, but the extent of the injury cannot yet be ascertained. They are still looking green, though in some places the Collector remarks that "they look yellow and of a darker colour than natural." It is estimated that the crop will be about half that of last season, *i. e.*, a beegah of paddy will produce just half what it would have yielded had there been no gale, but no correct conclusion on this point can be drawn for some weeks to come. About Baloghata the Collector reports that "the crops are looking very impoverished, and the outturn will in all probability be not more than a fourth of an ordinary harvest." In Doro Dooman, which, from its peculiar situation, suffered most severely, the ryots pleaded earnestly "for remission of rent and assistance in the way of food; the latter has been afforded in considerable quantities by the relief distributing Depôts. The loss of life—both human and animal—was at first estimated at ten-sixteenths." The ryots have lost not only their crop but their houses and property. As the Pergunnah will, at an early date, come again under settlement, the Collector remarks whether it would not be for our own interest to allow such remission as would enable the tenants to procure cattle and commence cultivation.

9. The Magistrate reports that most of the roads and bridges have been greatly damaged and injured. The work on the roads, irrigation works, and embankments "will occupy all available labour during the next two years," and the Magistrate recommends that Government should at once undertake the repairs. Labour will doubtless be the best and most effectual mode of administering relief to the people, and would enable them to support themselves and free them from a feeling of dependence upon charity.

10. The Magistrate of Midnapore and myself have placed ourselves in communication with the Cyclone Relief Fund Committee and also with Mr. D. J. McNeile, whose timely and judicious appointment has been of great service to the people in establishing distribution Depôts along

the right bank of the River between Oolobariah and the Russoolpore River. Two River Steamers have been placed under his orders to convey food and clothing, and the relief afforded has been not only great but judiciously administered. The reports of this Officer's proceedings has been sent to the Commissioner of the Nuddea Division and need not to be alluded to by me in this place.

11. **HOWRAH.**—In the Town of Howrah the loss of life is reported by the Police to be only ten, but this does not include those who were either drowned or crushed to death in the wrecks of ships and large boats along the banks of the river. The number of houses blown down and otherwise damaged is very large; in fact, few of the masonry buildings escaped injury, and several were blown down. The greatest loss has been amongst the fruit trees and gardens; in fact, the gardens in the Howrah District supplied a large share of the fruit sold in the Calcutta markets, and the loss to property in this respect has been very great; but the owners are generally wealthy, and the present loss is merely a temporary check to their annual income and profits. A mass of property from wrecks of boats and ships found floating on the river and along the banks of the river has been collected. The Magistrate estimates their value at Rupees 67,000. A notice has been published in the *Exchange Gazette* calling on the Public having claims on any portion of the property to appear. Some claims have been made, which are under investigation.

12. The greatest amount of injury and distress in the interior, as at present ascertained, is mainly confined to the southern part of the Oolobariah and Shampore Thannahs, or what is more generally known as the Pergunnah of Mundleghat, between the Damoodar and Roopnarain Rivers. Baboo Heraloll Seal is the largest proprietor, and has done much towards the relief of the distressed. In the more immediate neighbourhood of Oolobariah the Rajah of Ondool is the principal proprietor, but I have been unable to ascertain that this gentleman has done anything in the matter of relief. The Magistrate, Mr. Craster, has placed himself in direct communication with the Secretary, Cyclone Relief Fund, and the District Superintendent, Mr. King, has proceeded throughout the affected parts; but, as I above stated, in the absence of their report I am unable to give the results of their proceedings.

13. I would mention that the chief want appears to have been that of fresh water, the tanks on the river side having been injured by salt water, and those more inland from the falling of trees into them. The steps first taken by the Relief Committee in this part seem to have been well calculated to afford relief, and have, I understand, been carried out in a more extended scale of operations.

14. **HOOGLY.**—The effects of the gale were felt throughout the District, but chiefly to the south and east. The loss of life registered by the Police is 112, but the Magistrate believes that many deaths have not been reported. The Thannahs which have suffered most are those of Bullagore and Serampore. A great number of Native huts have been levelled with the ground. Many fruit trees have been completely destroyed. To form an idea of the loss of trees the Magistrate reports that 325 trees have been uprooted

within a distance of two miles on the Grand Trunk Road. The sugarcane crop has suffered greatly, only two-thirds of the average produce being expected to be realized. Little or no damage has been done to the rice crop. The jute crop, which is very extensive in this District, has fortunately been cut and carried away. From the quantity of leaves that have fallen into the tanks the water in very many of them has been discoloured and rendered useless. The Magistrate has called the attention of the Landholders to adopt means to clear the tanks, the result of which has not been reported. The roads in the District have been much injured and additional funds to those hitherto allotted for their repair will be required. The destruction of trees in the villages in which the epidemic has been so destructive to human life will, I believe, be beneficial and have the effect of making inroads into the jungle and thus staying the ravages of fever. The attention of the Magistrate will be directed specially to this subject and to the employment of labourers in clearing the dense jungle described in Dr. Elliot's Report.

15. **BURDWAN.**—The Magistrate reports that the gale did but little damage in the District. The roads and public buildings have not been injured. At Culna a number of boats were wrecked on the river and necessarily much valuable property lost.

16. At Burdwan itself the storm continued with little variation in one direction (north by north-east) and without the sudden gusts of wind which proved so destructive in the parts more south. From the state of the country along the line of Railway the violence of the Cyclone appears to have commenced at Pundooa and continued southward.

17. **BEERBHOOM.**—The Magistrate states that the storm was not anything unusual, no houses have been injured, and little or no damage occurred.

18. **BANCOORAH.**—In this District no injury was caused. At Raneegunge a strong wind prevailed, commencing about mid-day, but not sufficiently powerful to stop the despatch of the ordinary daily Train.

19. I must apologize for the delay that has been occasioned in submitting this report, which, as stated at the commencement, has been occasioned by the absence of the returns of the local Officers. Mr. Smith, the Magistrate of Midnapore, has been throughout the Divisions of Hidgelee and Tumlook and inspected all the affected parts; but, owing to want of communication and great difficulties encountered by him in crossing the channels along the eastern banks, as well as the usual delay that occurs in communication between Midnapore and Burdwan, the delay has been inevitable.

From R. W. KING, Esq., District Superintendent of Police, Howrah, to the Magistrate of Howrah, (No. 517, dated the 26th October 1864.)

In accordance with your instructions I have the honor to forward herewith a Tabular Statement (No. 1) shewing the loss of life and property within the Town and Suburbs of Howrah caused by the late Cyclone.

2. As you will observe, the loss of life is far less than we at first were led to suppose. The number of houses appears very great, but when we consider the slight materials of which most of

them were composed, many being totally unfitted to stand against a moderate gale, and put up at the expense of a few Rupees, the loss is not after all so serious.

3. In the column headed "computed loss of property" I have taken the statements of the sufferers themselves, which no doubt are grossly exaggerated. About one-half, exclusive of the Railway buildings, would, I think, be a fair approximation to the truth.

4. The loss in cattle also has not been nearly so heavy as we might have expected; fortunately the Town and Suburbs did not suffer from the storm wave which proved so disastrous in its effects on the southern part of the District.

5. The fruit trees and gardens have suffered greatly, indeed hardly any trees are left; this I fear will be severely felt by the Ryots, and more particularly by the market gardeners in the direction of Bally, who were dependant on their orchards for a livelihood.

6. The filthy and unwholesome state of the tanks almost throughout the Town, caused by the immense quantity of rubbish blown into them, as well as by the number of trees which, after being blown down, are now rotting in the water, requires most serious attention, and will, if not speedily removed, most probably be productive of great sickness. As you are aware, nearly all the fish in the tanks have died from this cause, which alone speaks volumes for the fitness or otherwise of the water for the use of man. I shall have occasion, in my next report, to bring this subject more prominently to your notice.

7. The public thoroughfares, with the exception of those in the neighbourhood of Bishop's College, are now cleared sufficiently for the public traffic. The communication between Howrah and Seebpore was completely cut off after the Cyclone in consequence of the number of trees thrown across. We commenced, with the help of the ryots, clearing a passage as soon as the wind moderated on the evening of the 5th, and but for the stumps of the largest trees and the debris of the walls which were blown down the roads are restored to their former state.

8. I do not hear many complaints from the poorer class of inhabitants as to the want of means of subsistence with the exception of the want of wholesome drinking water. Firewood and fish are to be had almost for nothing; the latter is collected from the tanks abovementioned, so cannot be very wholesome. Rice is a little dearer now than before the Cyclone occurred, but the price of labour has risen enormously.

9. I should perhaps state that a number of Manjees were no doubt drowned and killed when the large country boats came near the shore. These boats, as you may have seen, were lifted by the force of the storm on the top of one another, and the Manjees were crushed underneath, but we can form no idea as to their numbers. The bodies are still under the sunken boats.

10. In conclusion I forward a Tabular Statement (No. 2) showing the amount of wrecked property secured by the Police, and either made over to the rightful owners or stored in your Cutcherry, with the exception of some which is still at Bally. The Force have been engaged almost night and day since the Cyclone either in saving property or in destroying damaged and unwholesome articles of food.

11. As soon as the reports from the District have been received, in the collecting of which there must be some delay in consequence of the surviving ryots having for a time abandoned the remains of their villages, I purpose forwarding a similar report of the loss in the remaining Divisions for your information.

From R. W. KING, Esq., District Superintendent of Police
Howrah, to the Magistrate of Howrah,—(No. 524, dated the 2nd November 1864.)

In accordance with your request I have the honor to forward, herewith, my report of the destruction caused throughout the District of Howrah by the late Cyclone. A Tabular Statement is herewith appended shewing the loss of life, property, cattle, &c., from the same cause.

2. I have myself visited the southern part of the District, in which quarter the hurricane was most severely felt, and, although doubtless a very heavy calamity has befallen the country, still it might have been worse, and, as far as I have seen, we have great reason for thankfulness that the incoming rice crop has suffered very slightly, if at all, excepting in those places over which the storm wave actually broke.

3. In the villages on the river side, and more particularly in those which lie to the south of Oolobariah, the loss of life has been very heavy. It appears, from what I gathered from survivors, that the deluge came on them almost instantaneously, not by any gradual rising of the tide, consequently the women and children had no time to escape but were drowned in their houses. In and about the villages abovenamed a large quantity of cattle were collected ready for the Calcutta market; these also were all swept away. I will just instance as an example, and as I heard it from the ryots, the manner in which Koosbereah, (a village near Oolobariah,) with its inhabitants, &c., was destroyed.

4. After the Cyclone had commenced the women and children and many of the men took refuge within their houses. Almost in an instant and without any warning the water was over the village, and just about the same time the heaviest gusts of wind came which threw down all the huts so that the inmates, even if they were not actually drowned, could not escape; to crown all, a number of large peepul and other trees were blown on the debris of the houses; this of course completed the destruction both of man and beast. The whole is now one festering mass. I attempted to go near it, but the fearful stench rendered it impossible for any one to do so. The only course to follow, with this and other villages similarly circumstanced, will be to leave them until the dry weather, and then to fire the whole mass.

5. As far as this District is concerned most absurdly exaggerated reports have appeared in the Public Papers regarding the distressed state of the people. In Oolobariah I found that the Buneahs had constructed dwellings for themselves out of the ruins of their houses and their shops were open as usual. Rice, dhall, sweetmeats, &c., were plentiful, and rice was selling at a Rupee a maund cheaper than in Calcutta!! I saw a letter in the *Englishman* stating that there was great distress at "Moishrakha;" I happened to pass through this place on my way to Bagnan the very day before the date of the letter. I found the Bagnan Bazar well supplied and prices about the same as at Oolobariah; labour was

scarce and wages high, from five to eight annas a day, consequently. I cannot understand what reason there could be for the distress named by the writer, as you are aware "Moishrakha" is only a short distance from Bagnan.

6. When I was at Bagnan I requested Mr. Benett, who acts as Manager for Baboo Heera Lall Seal in that part of the country, to inform his employer that a supply of rice, &c., would be of great benefit to his ryots in Shampore and Bagnan. I enclosed this in a letter from myself, and I am glad to say that the Baboo at once sent down about Rupees 1,500 worth of rice and other articles of food, and expressed his willingness to do more if it was thought necessary. If the other Zemindars in this District would act in the same manner, there need be little or no apprehension of famine or distress for want of food.

7. As you are aware, a large quantity of wrecked property is being continually washed up. This is being collected by the Police (pending orders on the subject from yourself) ; but in spite of their exertions I am satisfied that a vast amount has been taken and concealed by the ryots, many of whom, it is said, have, far from being sufferers by the Cyclone, become suddenly wealthy. We shall possibly in the course of time recover some portion of this, but the greater part has, I fear, been made away with.

8. I could not help being struck with the very healthy appearance of the incoming rice crop. I went through a large extent of country, and, with the exception of a few places which had been swept by the water, it appeared as though no storm had ever passed over. In spite of what the Buneahs and grain dealers choose to say relative to a scarcity for the coming year, I do not believe that, with the exception of the Shampore Division and a small portion of Ooloobariah, any real damage has occurred to the crop.

9. The loss of cattle is heavy, but many of them were brought down from Midnapore and other Districts to the Calcutta market, consequently the loss does not fall so heavily on the ryots of this District. I noticed, when travelling through the canal between the Hooghly and the Damoodah Rivers, that on both sides the country was teeming with cattle.

10. The greatest difficulty which I foresee, and one with which we are almost powerless to contend, will be the want of good water. Nearly all the tanks being filled with the trees, leaves, &c.,

which were driven into them by the force of the wind, the water has become putrid, and as the ryots will not exert themselves to clear away these nuisances, I fear that sickness will arise from this cause. I have ordered the Police at each of the Stations to clear at least one tank for their own use. In the southern parts of the District the salt water has, for the present I fear, destroyed the tanks near the river banks; of course it will require time before it can again become fit for the use of man.

11. Perhaps it may not be out of place here to call your attention to the great want of good drinking water which always exists at Ooloobariah. It is a populous and increasing village, and before the Cyclone there was traffic enough to induce four Steamers to run to and from Calcutta daily. The bazar, &c., belongs to the Ondool Rajah ; but, judging by what he has done for his ryots during the late calamity, I fear that there is but little hope of any assistance from him. A large pucca tank would be a very great boon to the inhabitants and travellers.

12. The ryots complain bitterly of the loss of their fruit trees, and this I fear will in reality prove to them a very serious misfortune, and one which will be felt throughout the District in the ensuing year; the coconut trees have, however, in most places withstood the violence of the wind. It will now be all the more necessary for the Zemindars to exert themselves and to assist the ryots by distributing fresh trees and plants throughout their Zemindarees.

13. I beg to state in conclusion that I believe that the Divisional returns of loss herewith forwarded are tolerably correct, with the exception of Shampore. I do not, from my knowledge of that Division, think that there ever were in it the amount of cattle said to have been destroyed. As you are aware the soil is very barren and saliferous, consequently there is but little food for their sustenance. I think it also very probable that many of the ryots who are returned as dead may have fled to other Districts. The loss shewn under the heading "computed loss of property" I have already noticed in my former Report on Howrah itself as being, in my opinion, untrustworthy.

14. You will observe that the Return forwarded with my letter No. 517 of the 26th ultimo is included in the present Tabular Statement, which shews the total loss caused by the Cyclone throughout the whole District of Howrah.

No. 2.

Tabular Statement shewing the probable Value of the unclaimed Property seized in the Town and Suburbs of Howrah after the late Cyclone.

Nature and Quantity of Property.			Probable Value.	TOTAL.
<i>Howrah.</i>			Rs. As. P.	Rs. As. P.
65 Bales of cotton	..	..	6,500 0 0	
13 Bales of jute	...	..	117 0 0	
25 Bundles of tobacco	..	...	50 0 0	
2 Bundles of pepper	..	...	20 0 0	
Wood and planks	..	..	10 0 0	
100 Maunds of Salt	..	...	500 0 0	
				7,197 0 0

Nature and Quantity of Property.				Probable Value.	TOTAL.
				Rs. As. P.	Rs. As. P.
<i>Gollaberry.</i>					
200	Bales of jute	...	...	1,800 0 0	
146	Packages of pans	...	...	450 0 0	
83	Bales of pepper	...	...	700 0 0	
18	Bales of gunny	...	...	400 0 0	
18	Bales of cotton thans of different descriptions	...	...	6,000 0 0	
19	Cases of brass utensils (lotas, &c.)	...	...	760 0 0	
21	Cases of cocoanut oil	...	...	504 0 0	
4	Barrels of rum	...	...	320 0 0	
9	Bags of cotton thread	...	...	500 0 0	
8	Packages of hatchets	...	...	100 0 0	
42	Bags of betel-nut	...	...	315 0 0	
24	Ingots of spelter	...	...	150 0 0	
24	Bottles of vinegar	...	...	12 0 0	
1	Box of earthenware	...	...	40 0 0	
2	Cans of paint oil	...	...	24 0 0	
1	Box containing superfine broad cloths	...	...	1,000 0 0	
1	Box containing glass beads	...	...	300 0 0	
86	Bundles of sheet iron	...	...	1,000 0 0	
2	Boxes containing China crackers	...	...	400 0 0	
129	Thans of silk	...	...	1,200 0 0	
	Timbers, boats, bamboos, &c.	...	...	700 0 0	
	Sandal wood	...	...	1,000 0 0	
13	Iron rods, &c.	...	...	1,000 0 0	
	Serampore paper	...	...	600 0 0	19,275 0 0
<i>Seebpore.</i>					
13	Bags of black pepper	...	...	156 0 0	
46	Cases of oil	...	...	1,104 0 0	
656	Bags of jute	...	...	6,500 0 0	
1	Bundle of Native wearing apparel	...	...	5 0 0	
821	Bags of betel-nut	...	...	2,401 8 0	
3	Maunds of old coir rope	...	...	5 0 0	
1	Ship's buoy	...	...	5 0 0	
3	Empty wooden boxes	...	...	6 0 0	
1	Box locked, contents unknown	...	...	.....
	Cash Rupees	...	...	86 1 9	
175	Bags of pepper	...	...	1,750 0 0	
350	Bags of rice	...	...	2,100 0 0	
105	Bales of cotton	...	...	14,175 0 0	28,353 9 9
<i>Bally.</i>					
2	Broken wooden chests	...	...	3 0 0	
1,008	Bales of jute	...	...	9,072 0 0	
25	Iron nails	...	...	0 12 0	
7	Bags of linseed	...	...	25 0 0	
2	Bags of castor seed	...	...	6 0 0	
1	Pair of wooden doors	...	...	3 0 0	
2	Iron chests	...	...	60 0 0	
2	Bags of pepper	...	...	10 0 0	
9	Masts of Ships	...	...	200 0 0	
100	Pieces of saul wood	...	...	1,200 0 0	
	Red powder	...	...	200 0 0	
4	Iron anchors	...	...	8 0 0	
26	Bundles of iron bars	...	...	85 0 0	
1	Bag of long pepper	...	...	10 0 0	
1	" dry ginger	...	...	50 0 0	
4	Bundles of steel	...	...	150 0 0	
10	Seers of nut	...	...	2 8 0	
73	Gunny bags	...	...	25 0 0	
5	Boats	...	...	1,000 0 0	
4	Seers of tobacco	...	...	1 0 0	
	Broken planks of boats	...	...	20 0 0	
40	Masts of sbondree wood	...	...	200 0 0	
3	Pieces of teak wood	...	...	125 0 0	
1	Maund and fifteen seers of pepper	...	...	7 0 0	
1	Helin	...	...	2 0 0	
1	English dog	...	...	.....
2	Bales of cotton	...	...	250 0 0	12,865 4 0
Total Rupees				.....	67,490 13 9

Tabular Statement shewing loss of life and destruction of property in the District of Howrah caused by the Cyclone of the 5th October 1864.

Names of Police Stations.	NUMBER OF PERSONS KILLED AND DROWNED.			Number of Cattle killed and drowned.	NUMBER OF HOUSES DESTROYED.		Computed loss of property.	REMARKS.
	Men.	Women.	Children.		Pucka.	Kutchra.		
Seebpore	2	50	2,775	Rs. As. P. 70,000 0 0	The "computed loss of property" is taken from the statements of the sufferers themselves. I do not consider it trustworthy, and should think that one-half would quite cover it. The loss in fruit trees, pân khets, vegetable crops, &c., which is not shewn in any column of this Return, has to be taken into consideration.
Howrah	3	..	..	8	47	1,723	2,22,900 0 0
Gollabarry	5	..	..	50	50	5,000	1,00,000 0 0
Bally	..	..	..	12	5	5,262	94,611 0 0
Doomjoor	8	4	1	250	23	35,114	12,92,897 0 0	
Jugguthbullupore	3	2	..	176	83	7,094	4,83,247 0 0	
Amptah	17	6	9	455	28	24,678	5,57,021 0 0	
Bagnan	3	3	..	72	2	25,000	6,54,721 0 0	
Shampore	385	497	605	9,307	11	24,041	3,70,709 0 0	
Ooleobariah	179	131	115	2,432	17	18,871	22,03,725 0 0	
Total	605	643	730	12,762	316	1,50,158	60,49,881 0 0	

R. W. KING,
District Superintendent of Police, Howrah.

HOWRAH, }
The 1st November 1864.

Tabular Statement shewing loss of life and destruction of property in the Town of Howrah caused by the Cyclone of the 5th October 1864.

NAMES OF POLICE STATIONS.	NUMBER OF PERSONS KILLED AND DROWNED.			Number of Cattle killed and drowned.	NUMBER OF HOUSES DESTROYED.		Computed loss of property.	REMARKS.
	Men.	Women.	Children.		Pucca.	Kutchra.		
							Rs. As. P.	
Seebpore	2	...	..	0	50	2,775	70,000 0 0	
Howrah	3	...	...	8	47	1,723	2,22,900 0 0	
Gollabarry	5	...	...	50	50	5,000	1,00,000 0 0	
Bally	0	...	...	12	5	5,262	94,611 0 0	
Total ...	10	...	...	70	152	14,760	4,87,511 0 0	

R. W. KING,
District Superintendent of Police.



SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, DECEMBER 14, 1864.

OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE will henceforward be published, containing such Official Papers and Information as the Government of Bengal may deem to be of interest to the Public, and such as may usefully be made known.

Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on a payment of six Rupees per annum if delivered in Calcutta, or twelve Rupees if sent by Post.

No Official Orders or Notifications, the publication of which in the GAZETTE is required by Law, or which it has been customary to publish in the GAZETTE, will be included in the SUPPLEMENT. For such Orders and Notifications the body of the GAZETTE must be looked to as heretofore.

Correspondence concerning Slaughter Houses for supplying the Calcutta Market, &c.

From MESSRS. V. H. SCHALCH, H. A. COCKERELL, and J. I. WILLES, Members of the Committee appointed for the purpose of enquiring into the present state of the Slaughter Houses in the Suburbs of Calcutta, and of reporting on the best plan of establishing Slaughter Houses, under proper regulations, for the use of the Public and the Troops, to the Under-Secretary to the Government of Bengal,—(dated the 4th November 1864.)

We, the undersigned, having been appointed a Committee "for the purpose of enquiring into

* Letter of Under-Secretary to the Government of Bengal, No. 365T. of 28th May 1864.

the present state of the Slaughter Houses in the Suburbs of Calcutta, and of reporting on the best plan of establishing Slaughter Houses, under proper regulations, for the use of the Public and the Troops,"* have the honor to submit the following Report:—

2. All the Slaughter Houses from which the Town of Calcutta and its Suburbs are supplied with meat are scattered throughout the four Divisions of the Suburbs, and extend from Chitpore on the north to Alipore on the south.

3. They number in all forty-six, and the daily average of animals, bullocks, goats, sheep, and pigs slaughtered in them is calculated at 519, as shewn in detail in the accompanying Statement.

4. The most important Establishments were visited by the Committee, and the mode in which their proceedings are conducted was ascertained to be as follows:—

5. The cattle are purchased by the butchers at the various Fairs held twice and three times a week in the neighbourhood of Calcutta, and are brought to the several Slaughter Houses

immediately after purchase and there housed, except in few instances, where the premises of the purchasers happen to be close to the Slaughter Houses.

6. Fodder is brought as required from the several fodder-marts, but is not ordinarily stored on the premises of the Slaughter Houses, nor is there pasturage attached to them.

7. Killing commences each day between the hours of 3 and 4 p. m., and is generally completed in the largest Slaughter Houses by 8 or 9 p. m.

8. The cattle are slaughtered in long sheds on a raised earthen floor, through the centre of which runs longitudinally a trench dug in the earth.

9. By this trench the blood is carried off and allowed to soak into the ground outside the Slaughter House, although it is alleged, but evidently without truth, that the blood is caught in gumlals and buried on the outskirts of the premises. After the slaughtering is completed the Slaughter Shed is sprinkled by the more cleanly of the butchers with a slight layer of lime.

10. Immediately after slaughter the carcass is hung up and skinned and cleaned by the butchers, the skins and the hoofs being carried away by the Chumars, and the horns by a caste of men who are workers in horn.

11. The entrails are cleaned by the Chumars and there and then sold; the more liquid contents of the entrails are then thrown out on the premises where the blood is collected, while the more solid dung is allowed to accumulate in heaps until removed by persons who prepare it into cakes for fuel.

12. The stench from the ground where the blood and liquid dung are allowed to accumulate is most offensive and overpowering, and the whole space is covered with vultures, kites, and mangy dogs.

13. Surrounded by this stench, and in the midst of these effluvia and emanations from the ordure and blood, the carcasses remain suspended from 8 or 9 in the evening to about 4 or 5 in the morning, when they are sold, either whole or in part, at the option of the purchasers, for private consumption and for removal to the various meat markets and stalls.

14. The proprietors of the Slaughter Houses receive a fee of one anna per head for each animal slaughtered.

15. It will be observed from the statement that few pigs are brought to the Slaughter Houses, but it must not be presumed that the consumption of pork is limited to the number therein shewn.

16. The whole neighbourhood of Entally abounds in piggeries kept by the European provisioners, the Chinamen, and the lower classes of Natives.

17. Of these those owned by the two first-mentioned classes are generally admirably kept.

18. The Chinese kill rather for the manufacture of lard than for the supply of the pork market, but the flesh, after every accessible piece of fat has been cut from it, is sold for consumption.

19. The piggeries kept by the lower order of Natives are *filthy in the extreme*, and form a great contrast to those maintained by the Chinese, in which the arrangements are really good, and which are as cleanly as such Establishments can be.

20. Of the existing Slaughter Houses it will suffice to state that nothing could be more disgusting, more nauseating, nor more injurious to the purity of the meat than their present condition, for in none is any effectual attempt made at cleanliness or drainage.

21. To remedy the evil attending the present state of things we recommend that—

1st.—There should be one Public Establishment at which all the animals, whether bullocks, calves, goats, sheep, or pigs required for the supply of the Town and Suburbs, should be slaughtered, and the slaughter of such animals in any private premises should be prohibited with the exception stated in paragraph 45.

2nd.—The Public Slaughtering Establishment should be constructed on the most approved principles, should be under the control of the Municipal Authorities, and all persons using it should be subjected to proper Rules and Regulations.

3rd.—No piggery should be allowed except under license from the Municipality. In piggeries so licensed pigs might be slaughtered under proper supervision for the inspection of the meat previous to sale.

22. We proceed to offer a few suggestions on each of these propositions.

23. In the selection of a site the imperative requirements are—

1st.—Facilities for drainage, for an ample supply of water, and for the disposal of the refuse of the Slaughter House.

2nd.—Central position and accessibility as regards the consuming Districts.

24. There is one locality where, in the opinion of the Committee, these requirements can be combined, that is, in the piece of ground bounded on the west by the Palmer's Bridge Road; on the south by the Chingreehatta Road; and on the north by the high level sewer of the Calcutta Drainage.

25. Were the Slaughter Houses established on this site, there would be direct drainage for the blood and liquid refuse, as well as for the washing of the floors and premises, into the high level sewer; any quantity of water could be supplied at a mere nominal cost from the Pumping Station of the Calcutta Drainage works which will be erected on the opposite side of the Palmer's Bridge Road; the ordure and more solid refuse could be removed to the Salt Water Lake by the Calcutta Municipal Railway, which will be laid down at the north boundary of the proposed site; and, lastly, the Slaughter Houses would be situated centrally as regards the North and South Divisions of the Town; would be connected with the Dhurumtollah and Toretta Bazaars by a line of good roads; would be in the immediate vicinity of the new Sealdah market, and within easy reach of the Suburbs of Cossipore, Balesgunge, Alipore, and Garden Reach by means of the proposed Suburban Railway.

26. Objection may be taken to the concentration of the Slaughter Houses in one locality, but a reference to the accompanying Statement will shew that at present by far the larger number of animals is slaughtered in the Entally Division, in which it is proposed to locate the Slaughter House, and in the Chitpore Division, which is supplied chiefly from Slaughter Houses in Narcoodangah, which is but a short distance from the proposed site; and further, nearly all the private consumers of meat supply themselves from the meat bazaars, the vast majority of which is within a reasonable distance of Palmer's Bridge.

27. In no other localities can proper means of drainage and of water supply be obtained, and we therefore deprecate the establishment of separate Slaughter Houses for the supply of the out-lying parts of the Alipore and Garden Reach Suburbs, because their supervision would be expensive and difficult, and they would become undoubtedly little better than the existing pestilential Slaughter Houses.

28. The works to be constructed on the proposed site should be of the simplest description. They should consist of sheds for slaughtering cattle, sheds for hanging and cutting up the carcasses, and a large reservoir for water for flushing the drains with a sufficient head of water to deliver it at a height of six feet from the ground, and the whole area should be enclosed by a plain iron railing.

29. *Outside* of the enclosures there should be sheds for cleaning the entrails of the slaughtered animals, a process which should on no account be allowed within the enclosure, and close to these should be the stands for the trucks by which the more solid refuse could be removed to the Salt Water Lakes, there to be consumed, together with the city offal and refuse, by fire or by mixture with quick lime, or in such other manner as would best utilize it.

30. Slaughter Sheds.

These should, in the opinion of the Committee, be constructed of a raised floor paved with Burdwan slabs set in concrete and covered in by a roof on Clarke's principle (similar to those erected at the Southern Gowkhana) supported on masonry pillars, the whole being entirely open at the sides and ends. They should be sufficiently wide to admit of two rows of animals being slaughtered at the same time in such a manner that the blood might fall into a drain in the centre of the sheds, and pass thence into a main

drain leading into the high level sewer, the opening into the latter being protected by a stink-trap.

31. Any objection to a paved floor on the score of injury to the flesh caused by throwing the animal on a hard surface could be met by covering the floor daily with earth or sand, a supply of which could be obtained either by boats from the canal or by rail from the Salt Water Lakes.

On no account should an earthen floor be allowed, as it must become saturated with blood and be most offensive.

32. The floor should slope towards the centre drain, and hydrants should be fixed to each of the pillars, so as to allow the entire surface of the floor to be flushed into the centre drain.

33. The Hanging Shed should be similarly in construction to the Slaughter Sheds, there being two rows of gallows for suspending the carcasses, and a sufficient width should be given for dressers to be put up by those butchers who may require to cut up the carcasses, and each dresser should be furnished with a pipe leading from the reservoir with a stop-cock.

34. The Hanging Sheds should be situated to the south of the Slaughter Sheds, so as to be to windward of the latter during the hottest season of the year. They should be constructed parallel to and in close proximity to the Slaughter Sheds, so that each butcher could at once remove his carcasses to the gallows opposite to where they have been slaughtered. Each butcher would be entitled to use the extent of the Hanging Shed corresponding to the extent of the Slaughter Shed appropriated to him.

35. Allowing a width of eight feet for each bullock in the Slaughter House, and four feet for the centre drain, the breadth of the Slaughter House would be twenty feet.

36. If three feet be allowed in the length of the shed for slaughtering each bullock, the total length of the bullock Slaughter Sheds would be 220, or say 250 feet, in which 160 bullocks could be slaughtered in a double row.

37. For sheep, goats, and pigs the Slaughter and Hanging Houses should be of the same dimensions as those for the bullocks, but the width would admit of four rows instead of two rows of animals being slaughtered and hung up, the floor being constructed with a double slope into two central and longitudinal drains.

38. Allowing one and a half feet for each sheep, goat, or pig, a length of 150 feet would suffice for the daily slaughter of 400 sheep and goats, and the same for the Hanging House.

39. The area required therefore would be $250 \times 150 = 400'$ feet by 100 feet in width, which would allow of twenty feet space between the sheds and the same distance between them and the enclosure wall. This would give 40,000 superficial feet, or 26. 15c. 40f.

40. An area of five beegahs would therefore amply suffice for all requirements, including site for reservoir, for a row of tiled huts to be constructed at the expense of the butchers in which they could keep watch and ward, and store their implements, and for an overseer's residence.

41. No animal should be allowed to enter the enclosure, except when brought to be slaughtered, and should be at once taken to the Slaughter House and put into his allotted stall.

42. No yards or sheds for cattle should be permitted in the immediate vicinity of the

slaughter enclosure, for, with however great care they are supervised, the effluxia from them must be offensive, and injuriously affect the meat.

43. The butchers might be left to make their own arrangements for housing and feeding their cattle previous to slaughter, but it might be found advisable to purchase a plot of ground to the eastward, say quarter of a mile distance from the Slaughter House, and to rent it to the butchers for these purposes under proper stipulation for preserving it in a wholesome and cleanly condition.

44. The Slaughter Houses, premises, and any pasturage attached to them should be under the immediate supervision of an Officer of the Municipality to be called the Supervisor of Slaughter Houses; and Bye-Laws should be drawn out for their regulation and conservancy, for the inspection of the cattle previous to slaughter, and for their rejection when diseased or unfit for consumption as food; and a Bye-Law should also be enforced prohibiting the sale of any meat within the markets of the Town and Suburbs of Calcutta, except such be certified to have been obtained from the authorized Slaughter Houses, and to have been passed by the Supervisor.

45. No piggeries should be allowed except under license from the Municipality, and all pigs intended for consumption as food should be slaughtered within the Slaughter House premises, except where the proprietors prefer taking out a separate license to slaughter on their own premises. This exception is necessary, because the sale of pork is, in many instances, a secondary consideration, the manufacture of lard being the primary object of the large and numerous piggeries kept up by the Chinese in the Suburbs.

46. No such licenses should be granted until the proper Officer of the Municipality has satisfied himself of the fitness of the arrangements of the premises, and only on payment of a fee sufficient to cover in the aggregate the expenses attending the supervision of such piggeries independent of the Slaughter Houses.

47. The probable cost of carrying out these propositions has been carefully estimated, and would not exceed Rupees 1,00,000, including the purchase of five beegahs of land for the slaughtering premises, ten beegahs for housing cattle, house for the Supervisor, sheds for slaughtering and hanging, and all the necessary adjuncts, and the annual expenditure for supervision and maintenance, including wear and tear, Rupees 11,000, as shown in the margin.

48. The expense would have to be met from the fee charged for slaughtering. The fee at present paid to the proprietors of the land of the several Slaughter Houses varies from 1 anna to $1\frac{1}{2}$ annas per head, but as the butchers would be relieved of the expense of the removal of the refuse, an average rate of $2\frac{1}{2}$ annas a head might be fairly charged for each animal slaughtered, or, say 3 annas for bullocks, and 2 annas for sheep, goats, and pigs per head.

49. The return from fees and from rent of cattle ground would yield fully 12 per cent. on the outlay after covering annual expenditure.

	<i>Per Annum.</i>
Salary of Inspector and Establishment	Ra. 3,600
Expense of removal of refuse, water-supply, and contingencies	... .. 2,400
	<hr/> 6,000
Wear and Tear of Buildings, &c., at 10 per cent. on cost of Rupees 50,000	... .. 5,000
Total Ra.	<hr/> 11,000

50. Such are the arrangements which wo unanimously recommend for the establishment and regulation of the Slaughter Houses for the use of the Public.

51. The Committee, however, differs as to the measures to be adopted for the slaughter of the animals purchased for the supply of the Troops in Cantonments. These animals are at present killed at the Kooreca Slaughter Houses, which are situated about a quarter of a mile to the east of the Park Street Burial Ground, and are open to all the objections and evils attending the other Slaughter Houses, though in a less degree, owing to the supervision which is to some extent exercised over them by the Commissariat Department.

52. The Commissariat Member of the Committee is of opinion that the Slaughter Houses for the supply of the Troops, together with their cattle and fodder sheds, should be located at some distance from those which supply the Public, and from which they should be entirely distinct; and recommends as a site for their construction a large piece of ground situated to the east of the line of the Calcutta and South-Eastern Railway beyond the 4th over-bridge.

53. His reasons for this opinion are—

1st.—That the cattle for slaughter must at all times be kept ready for the inspection of the Commissariat Officers and subordinates; by the latter they are selected, branded, or rejected.

2nd.—After being slaughtered the carcasses have to be kept in the slaughter yard till the time for removal in the morning to the ration grounds of Regiments.

3rd.—It would be possible if the Town and Commissariat Slaughter Houses were used in common for other than cattle passed by the Commissariat butchers to be slaughtered, or for the carcasses to be changed after slaughter, because the air in the immediate vicinity of a Slaughter House must be foul, and no European subordinate could be expected to remain at the shambles longer than necessary to supervise the slaughtering and properly preparing of the meat.

4th.—No cattle other than those bearing the Commissariat brand should be allowed near the pens or shambles. It is the order of Government that these places be open at all times to the inspection of Officers Commanding Troops, as well as the Commissariat Officer, that they may be satisfied that the cattle are not only properly fed, but that diseased cattle are carefully excluded from the contractors' stock, and these stipulations can only be carried out as long as the Slaughter House is entirely at the control of the Commissariat Department.

54. The remaining Members of the Committee cannot concur in this opinion. They consider that the objections can be met by setting apart a portion of the Public Slaughter House for the use of the Commissariat Department by

the appointment of a Resident Officer on the part of the latter to reside at and exercise constant supervision over the slaughter of their cattle, and by the use of a paddock for their cattle separate from that used by the public butchers, but still within a convenient distance of the Slaughter Houses.

55. They are convinced that no site could be selected for the Commissariat Department, which would possess the facilities for drainage, cleansing and removal of filth, which specially attach to the site proposed for the Public Slaughter Houses, and that therefore the Commissariat Slaughter Houses must become in some degree open to the objections on the score of want of cleanliness and drainage which are the characteristics of the existing Slaughter Houses.

56. For instance, the site proposed for the Commissariat Slaughter House, although probably the best that could be selected owing to its spacious extent, to its isolated position, and to its possessing a fine tank, yet has no good natural drainage or any source of water-supply other than the tank, so that there would be considerable expense incurred in disposing of the blood and offal, and in keeping the premises sweet.

57. A further and very important advantage would, they consider, be gained by the conjunction of the Commissariat and Public Slaughter Houses in the reciprocal supervision and check which the two Departments, the Municipality and the Commissariat, could exercise, and which would tend to prevent want of vigilance on the part of either.

58. If it be determined that the two Establishments shall be combined, the Commissariat could either purchase at their own expense the land required for slaughtering and housing and feeding the cattle, constructing thereon the necessary buildings in strict uniformity with those adapted for the Public Slaughter Houses, or else they could be admitted to the use of a separate portion of the Public Slaughter Houses and of a separate paddock to be provided for them by the Municipality on the same conditions and on the same rates of payment as in the case of the public butchers.

59. The latter plan would probably be found to work the better of the two, as ensuring uniformity of supervision and of internal arrangements.

If, on the other hand, the site proposed by the Commissariat Member be selected, Slaughter and Dressing Sheds should be erected on the same plan as those recommended for the Public Slaughter Houses, but additional arrangement will have to be made and expense incurred for pumping up the water and for the disposal of the blood, offal, and manure, for which purposes the Municipal Drainage and Water-works and Railway would not in that locality be available.

NAME OF DIVISION OF SUBURBS.	Number of Slaughter Houses.	SLAUGHTERED DAILY.			TOTAL.
		Bullocks and Calves.	Sheep and Goats.	Pigs.	
1. Chitpore	11	8*	133	10	151
2. Entally	18	112	152	14	278
3. Baleegunge	8	12	61	...	73
4. Alipore	9	17	...	...	17
Total	46	149	346	24	519

From the HON'BLE A. EDEN, Secretary to the Government of Bengal, to the Chairman of the Justices of the Peace,—(No. 5299, dated the 28th November 1864.)

I AM directed to forward the accompanying copy of a Report, dated the 4th instant, from the Committee appointed to enquire into the present state of the Slaughter Houses in the Suburbs of Calcutta, and to report on the best plan of establishing Slaughter Houses, under proper regulations, for the use of the public and the Troops.

2. The Lieutenant-Governor desires me to state that he concurs in all the recommendations of the Committee, and I am to request that you will be so good as to move the Justices to carry them into effect in communication with the Suburban Municipality.

3. I am to observe, however, that, as the inhabitants of the Town will derive the greatest advantage from the establishment of a system of public abattoirs, it seems to His Honor right and proper that the cost of constructing such Slaughter Houses should be borne by them, although the proposed site of the Slaughter House to the west of the Palmer's Bridge Road is within the jurisdiction of the Suburban Municipality.

4. The Lieutenant-Governor thinks that the Suburban Municipality will probably be willing enough to co-operate with the Justices by making Bye-Laws for giving effect to such measures for the control and conservancy of the Slaughter Houses as the Justices may consider necessary, and the Suburban Municipality should have the option of taking over the Slaughter Houses at any future time on payment of the cost of the buildings with interest.

5. There seems to His Honor to be no objection to the proposal to license private Slaughter Houses referred to in paragraphs 45 and 46 of the Committee's Report, but great care must be taken that these licenses are only granted on very stringent conditions, and that these conditions are strictly fulfilled.

6. I am to add that the Lieutenant Governor agrees with the Committee in thinking that the Commissariat Slaughter House should form a part of the public abattoir. A communication will accordingly be addressed to the Military Department on the subject.

Papers concerning the grant of Cultivation Leases in Assam and Cachar.

From R. B. CHAPMAN, Esq., Secretary to the Board of Revenue, Lower Provinces, to the Secretary to the Government of Bengal,—(No. 232, dated the 27th June 1864.)

BEFORE the Board of Revenue give effect to

LAND REVENUE.
(Waste Lands.)

W. J. ALLEN,
A. GROTE,
and
E. T. TREVOR,

the orders communicated to their Junior Member in the Under-Secretary's No 228T., dated 19th ultimo, that the Lieutenant-Governor should have the opportunity of reading the accompanying Reports* upon the

* Commissioner of Assam, No. 166, dated 23rd January 1864.
Commissioner of Dacca, No. 80, dated 14th May 1864.

grant of cultivation leases to Tea Planters in Assam and Cachar.

2. The Board passed no orders upon the Report from Assam, being under the impression that the proceedings there were in accordance with the policy adopted by the Government in regard to the lease of waste lands in the District of Chittagong, which they supposed to be universally applicable. It still appears to them to be certainly desirable that the rules and practice in the matter of these leases should be, in their main features, and as far as possible, uniform throughout the country.

3. The Report of the Commissioner of Dacca shews that the impression of the Board of Revenue as to the terminable character of the Cachar cultivation leases was not entirely correct. The Board are unanimously of opinion that leases in the form appended to the Superintendent of Cachar's letter appended to the Commissioner of Dacca's Report do convey to the lessee a right of re-settlement, subject only to the "moderate assessment" that may seem proper to the Government on the expiration of the term of the lease.

4. They are further of opinion that, even though these leases contained no such clause as that which, they think, definitively conveys this right, nay, though they contained a clause, as suggested in paragraph 5 of the Under-Secretary's letter, providing specially "that they conferred no right of occupancy beyond the period of the lease and that, on the expiry of the lease, the Government should be free to enter as a landlord and dispose of the land as it pleased," it would still be impossible in practice, and unadvisable as a matter of policy, for the Government to deny to a leaseholder who had, upon a long lease, at his own expense, brought waste land into cultivation the right of re-settlement "at a moderate assessment."

5. Further, the Board think that the conclusion of the Superintendent of Cachar is sound, that it would be impossible, even if it were desired, to deny to European Planters leases upon the terms upon which they are obtainable by the Native cultivators, and that the question for decision is broadly whether these leases shall be granted to all alike or refused to all alike.

6. It is reported both from Assam and Cachar that, as regards the interests of the Government revenue, the grant of these leases is more profitable than the sale of waste lands, which, as yet at least, owing to various circumstances, often fetch at auction no more than the nominal upset price.

7. The Board are aware that the direct effect upon the Government revenue of one system as compared with the other is a matter of no great consequence, and that the really important question is which mode of proceeding will tend to the more rapid occupation and cultivation of these lands. Still it is well to bear in mind that the direct and immediate interests of the revenue are subserved rather than the contrary by the grant of these leases.

8. As regards the spread of cultivation, it appears to the Board to be clear that that system is likely to be most efficacious which is most in accordance with the wishes and interests of those concerned in the introduction of the new staples for the growth of which these lands are being taken up. In Cachar those interested in the cultivation of Tea have pronounced very decidedly in favor of the cultivation leases, only one

application for the purchase of land under the new Rules having, as far as the Board are aware, been yet made. In Assam the two systems are in operation with apparently equal favor side by side.

9. The Board are of opinion that it is certainly *prima facie* unnecessary for the Government to attempt to compel the Tea Planters to adopt one system rather than the other, and that the obvious policy is to leave them entirely free to take land in one way or the other as they please; for so will cultivation most rapidly advance.

10. Probably if these cultivation leases, commencing with an attractive rent-free tenure, are to continue to be available, the Waste Land Rules in Cachar at least will be, for the present, inoperative. It may be doubted, Messrs. Grote and Trevor think, whether this would not be contrary to the declared intention and policy of Her Majesty's Government, since as long as these leases are in force no grants of the lands so leased can be made under the Waste Land Rules to Capitalists who may desire to have them. Probably, however, the policy and object of Her Majesty's Government was simply to meet, as far as possible, the wishes of English Capitalists, and on this view, if experience shews that these Capitalists, or their representatives in this country, prefer to take leases rather than to buy the fee-simple of land, it would be, in fact, contrary to the policy of Her Majesty's Government in any way to discourage them. The Senior Member strongly objects to the curtailment in any way of the privileges in regard to the waste lands of Cachar hitherto possessed by the natives of the country, such as the right to a lease of which the first three years shall be rent-free. The majority of the Board are not so sure that the rent-free term is necessary to the promotion of native clearances. Upon this point enquiry will be made at once as desired in your letter.

11. Perhaps, however, the only question which as regards the policy of Her Majesty's Government arises out of the movement now reported is whether any modification of the Waste Land Rules is desirable or practicable, it being clear that some provision of those Rules must be distasteful to the Tea Planters, or they would not prefer a lease-hold to a fee-simple title. The distasteful provision is undoubtedly the Rule which requires an auction, but the Board are not at present prepared to propose any plan for its abrogation.

12. Upon the whole, though, as already stated in Mr. Trevor's Note, dated 29th April 1864, (Extract C.) he and Mr. Grote would prefer, for many reasons, to see the spread of free-hold grants, the Board would now regret the issue of any orders tending to discourage or interfere with the grant of cultivation leases of waste lands. That orders in the sense of the Under-Secretary's 5th paragraph would have that effect cannot be doubted, and the Board trust that they may be re-considered. They would rather remove all possible ambiguity from the terms of those leases and distinctly promise what, as before said, they do not think could practically be withheld, that the lessee shall be entitled to re-settlement upon a moderate assessment.

13. And they would at once correct what they conceive to be a mistaken practice on the part of

the Superintendent of Cachar, and direct the grant of these leases for the originally authorized term of twenty years. If this be not done leases will, of course, very soon cease to be taken. In the Board's opinion it would be highly inconvenient to arrange for all the leases of the District to fall in in one year as the Superintendent is now doing.

14. The conditions of the lease submitted by the Superintendent of Cachar have the Board's approval, and, if His Honor does not object, its main provisions should be applied in Assam and Chittagong also.

15. As regards eventual commutation the Rules for the redemption of land revenue, whenever they are published, will probably provide for the case of such leases. The Board see no reason for affixing to them any specially incommutable character.

16. Lastly, the Board are unanimously of opinion that, under the provisions of Section 1, Act XXIII. of 1863, waste lands can no more be leased than sold without the advertisement of the application for the minimum period of three months. The practice in Assam has not been hitherto in this respect in accordance with the law, but if the Lieutenant-Governor agrees with the Board they will at once prescribe attention to the requirements of the Act.

17. The object of Act XXIII. of 1863 is to give any parties, who claim rights in waste lands which are about to be leased or sold, an opportunity of having their claims adjudicated before the lands are disposed of, and under its provisions all waste lands disposed of by the Government in any way must, for that purpose, be advertised for at least three months before they are disposed of.

18. Should the Government approve and adopt the general policy advocated in this letter, the Board propose to add a chapter to the Waste Land Rules describing and defining the conditions under which cultivation leases will be granted, and they will move the Law Officers to prepare a proper legal form of lease for common use.

19. The preliminary Rules as to size, form, and survey of grants, the mode of application, &c., now applicable to applications for purchase, they would make applicable to applications for leases.

20. I am to take this opportunity of submitting, in reply to Government Order No. 1014, dated 11th March, the accompanying letter (see Appendix) from the Commissioner of Chittagong, No. 21, dated 17th May, submitting draft Special Rules for the grant of waste lands to meet the supposed special circumstances of the District of Chittagong.

21. If any such Rules are to be passed the Board have no objection to offer to Mr. Young's Rules. But they do not themselves consider that there is at present any necessity for such Special Rules, nor are they aware of any grounds upon which, if such Rules are passed for Chittagong, it will be practicable to refuse to extend them to other Districts.

22. The Board of Revenue are not informed upon what grounds the Government of Bengal proposed to the Government of India to treat Chittagong exceptionally in this respect. If it was anticipated that the waste lands of Chittagong would not prove saleable under the Waste Land

Rules, the Board would respectfully remark that experience would already seem to shew that the anticipation was unfounded.

23. The results of the May and June sales of waste lands at Chittagong have not yet been reported to the Board, but applications have already been made there for an aggregate area of 45,000 acres. The progress at Chittagong has therefore been decidedly more rapid than in other Districts, and though the expectation of more favorable terms alluded to by the Commissioner may tend to check applications for the moment, the Board do not doubt that the Rules will work well in Chittagong.

24. They, therefore, advise that, if the Government is not pledged to a contrary policy, no Special Rules be now conceded to Chittagong. The requirements of the Planters there will, the Board think, be fully met by the Waste Land Rules and the cultivation leases already authorized to be granted.

25. If any special cases come to light in which the Waste Land Rules may appear inapplicable they may be dealt with specially without the inconvenient precedent of Special Rules.

26. The Board of Revenue trust that early orders may be issued upon the subjects treated of in this letter.

From MAJOR W. AGNEW, Officiating Commissioner of Assam, to the Secretary to the Board of Revenue, Lower Provinces,—(No. 156, dated the 28th January 1861.)

IN reply to your letter No. 146, dated the 17th of November last, I have the honor to say that it has been the practice in all our Assam Districts to permit parties to take up, under the ordinary Settlement Rules, waste lands which are available for sale under the Waste Land Rules, and I beg leave to annex a Statement shewing the extent to which land is thus held on rent-paying pottahs.

Referring to your 2nd paragraph, I have the honor to observe that no precise Rules exist under which cultivators are allowed to break up waste lands. The custom, as regards ordinary cultivators, is to permit them to do so at their pleasure, provided no one else has a prior claim; and if the land be so taken up during the currency of a settlement, the Mouzahdar of course reaps the benefit until his lease expires. The new cultivation is then included with the old, and a pottah granted for it to the cultivator at full rates—he, as a general rule, having previously paid something very much lower—as an encouragement to him to extend his cultivation, or to settle in the Pergunnah, according as he may have been an inhabitant of it or a stranger come to settle; but the agreement, whatever its terms, is a matter that rests entirely between the cultivator and fiscal Officer, and with which the Deputy Commissioner has no concern.

When land, however, is required for Tea planting the system is quite different. It is usual in that case for the Planter to make his application direct to the Deputy Commissioner, who, after taking due precautions to discover whether any adverse claim exists, and none being preferred, issues a pottah at the full Pergunnah rates. There is no rule to restrict cultivators of new land to the cultivation of any particular crop or crops, or to confine their operations to any particular locality, nor is it desirable that any such restriction should be imposed. In my opinion the taking up of land for Tea-planting in the manner described

should be encouraged as much as possible, for it adds considerably to the Government revenue, and is a great convenience to Planters, who are, by this means, enabled to commence their operations at once without fear of being disturbed.

From C. T. BUCKLAND, Esq., Commissioner of the Dacca Division, to the Secretary to the Board of Revenue, Lower Provinces,—(No. 20, dated the 14th May 1861.)

I HAVE the honor to acknowledge the receipt of your No. 80, dated 19th ultimo, with its enclosure, containing the orders of the Lieutenant-Governor of Bengal, addressed to the Commissioner of Chittagong, that temporary and terminable leases of waste lands, conveying no proprietary right and not commutable, may be granted at the discretion of the Commissioner of the Division.

2. These orders are made applicable to Cachar by the instructions conveyed in your letter under acknowledgment, with directions to explain to the applicants that they can acquire upon a lease no permanent or commutable title.

3. I forwarded the above order to the Superintendent of Cachar, and requested him to submit a full report on some of the cases pending before him in order to enable me, with his assistance, to lay down some general rules on the subject. I also intimated to him that I thought it would be necessary to make a further reference to higher authority on account of the difficulties which would arise.

4. Captain Stewart, the Superintendent of Cachar, has now replied in his letter No. 102, dated 4th instant, of which a copy is herewith forwarded, and, though he has not made a report on any particular cases, he has brought forward several leading points which the Board will, I apprehend, find worthy of their consideration.

5. The Cachar Cultivation Rules (as they may be called by way of distinction) were originally introduced with the view of getting the District cultivated by Native settlers, who would clear the high grass jungle with which the valleys were covered and grow crops of rice. I now submit the translation of one of the ordinary pottahs granted to the settlers under these Rules, and in this instance it will be seen that, for the first three years, the tenure is rent-free, and that the highest rate imposed is Rupees 3 per hal,—a hal being equal to about 5 acres.

6. The Superintendent of Cachar has explained that, in the re-settlement of Cachar made by him in 1858-59, the full term of the temporary settlement was twenty years, and that in all leases since granted the term has been diminished, so that all the leases may come to an end in the same year, 1878-79. On this principle leases to be granted now would run for only fifteen years, and it is for leases of this duration, and on the conditions specified in the pottah abovementioned, that the parties interested in Tea-planting have now made their applications.

7. The chief point to be determined is the nature of the right which the lessee will acquire under this nominally temporary and terminable pottah. In the translation of the pottah the words are “that, after the expiry of the period for which this pottah is granted, the lands will be subject to re-settlement and to such moderate assessment as may seem proper to the Government.” The Superintendent, in the 3rd paragraph of his letter writes—“they (the Planters) ground their hopes for the permanency of the

lease on the Clause which states that, at the expiry of the term, the lands shall be re-leased to them on such moderately enhanced rates as may be thought proper." Here is at once a material difference as to terms. The pottah says the lands will be liable to re-settlement. The Superintendent's expression is that the lands are to be re-leased to the lessees. Under the former expression the re-settlement might be made with any one; under the latter it is confined to the lessee, provided he complies with the moderate assessment of Government. It may be true that in practice a re-settlement is made by preference with the old lessee in ordinary cases, but that is by favor and not as his right.

8. Looking at the terms employed in the Lieutenant-Governor's orders, where the leases are described as temporary, terminable, conveying no proprietary right, and not commutable, which were followed by the Board's instructions that the leases would confer no permanent or commutable title, I communicated these orders as strongly as possible to the Superintendent, requesting him to explain to the applicants not only that they would acquire no permanent or commutable title, but no right of occupancy or possession, which, as I had reported to the Board in my No. 366 of 2nd April, the applicants hope to acquire, and which I submit that they certainly will acquire if the lessee is entitled to the renewal of his lease on its expiry.

9. It must be open to little question that the applicants for lands on which they propose to make Tea Gardens do not contemplate anything short of a permanent title, as no man would lay out the capital required for a Tea Garden on land of which his lease ran for only fifteen years. It is clear that a lease perpetually renewable is almost as good as a grant in fee-simple, with the advantage that it does not require the outlay of capital at an inconvenient time; and further, the Planters probably anticipate that the Government will hereafter not be disposed to prevent the commutation of a lease into a fee-simple property where such a title is preferred for the formation of a Company.

10. But I think it cannot be too clearly understood that, where the Government now propose a terminable lease, a very different title will be conveyed if the Superintendent of Cachar is the correct interpreter of his own pottahs, which I think he is, for even if the term re-settlement be left alone for interpretation the evidence as to the practice of renewing the lease with the old lessee would be strongly in favor of the lessee. I therefore hope that the Board will give the Lieutenant-Governor an opportunity of seeing what the probable consequences will be of the application of his orders to Cachar if they are understood to sanction leases under the Cachar Cultivation Rules.

11. The Superintendent reports that there are fifty-eight applications from Europeans pending before him for no less than 1,47,333 acres of land. There are also five applications of the same sort from Natives. There is no doubt or concealment of the fact that the applications for lands on these terms are made by the Europeans in preference to the applications permissible under the Waste Land Rules, the object being to avoid the Rule which requires grants to be put up to competitive sale, and that the operation of the Waste

Land Rules has been particularly stopped by these applications.

From CAPTAIN R. STEWART, Superintendent of Cachar, to C. T. BUCKLAND, Esq., Commissioner of the Dacca Division,—(No. 102, dated the 4th May 1864.)

I HAVE the honor to acknowledge the receipt of your letter No. 301 of the 27th ultimo, with its enclosures.

2. I beg to enclose a translated copy of the leases now given to the natives of the two Districts for any new lands that they may apply for in extension of lands already held by them and also to new settlers.

3. You are aware that almost the entire lands of Cachar, which were then on the Towjee, were re-settled by me in 1858-59 for a term of twenty years at rates varying from Rupees 2 to Rupees 3-8. Lands that have since been applied for on the same terms have been settled by me at the various rates, but for periods so adapted as to make the duration of the leases continuous with the general re-settlement of 1858-59. Thus, lands leased in 1859-60 were leased only for nineteen years, those in 1860-61 for eighteen, and so on; this was with a view to simplify future re-settlement work, and under a system pursued in the settlement for fifteen years which preceded the present one. Lands leased now, therefore, would be for a period of fifteen years only, five having elapsed since the general re-settlement was made, and it is for a lease for this term only that the Planters now apply. They ground their hopes for the permanency of the lease on the clause which states that at the expiry of the term the lands shall be re-leased to them on such moderately enhanced rates as may be thought proper; but if this hope of re-settlement is taken away all confidence will at once be lost, and no Planters could possibly hold lands and lay out money on them in the large sums which are necessary should he acquire no permanent title or have no title of occupancy or possession as stated by you; the latter, as I suppose, after the expiry of his lease of thirty years.

4. Since the issue of Rules for the sale of Waste Lands I referred the matter as to whether the usual system of land settlement should or should not continue, and letter No. 169, dated 28th October 1862, from your Office, declared that it should. These settlements, however, referred chiefly to Natives. When, however, on the old Assam Rules becoming obsolete, numerous applications fell from European Planters under the District tenure, and these embraced lands included in the Waste Land Register, a Register kept with the view of propagating the new Sale Rules, and when it was evident that these applications were made with a view to evade the auction clause of those Rules, the representation was made which has caused this correspondence.

5. If I might be permitted to make a suggestion, I would say that if the Natives are allowed to take up lands under the existing Settlement Rules, and Planters are not, it will lead to *benami* transactions. The leases made to Natives are not commutable certainly, but they are permanent to all intents and purposes, restricted only by the clause which binds them, at the expiry of the lease, to pay the moderately enhanced revenue of the future settlement, and Natives will acquire these tenures only to dispose

of them to Planters. Already in a list of sixty-three applications for large tracts of hill lands five applications are those of Natives, and although their ostensible reason for making them is to secure firewood and bamboos for themselves, yet I have no doubt they would ultimately be sold to Planters at rates which the Native could not resist taking, leaving his future supply of firewood and bamboo to Providence. These applications from Natives, I may say here, are, for the present, in abeyance, in like manner as are those of the Planters, as they trespass alike on the Waste Land Register.

6. The applications now filed aggregate 1,47,333 acres. If left to the present District Rules they would be settled most probably in some such wise as follows:—

For the first two years	Rent-free,
Following three „	at 8 Annas per hal,
Ditto five „	„ 1 Rupee „
Ditto „ „	„ 2 Rs. or 2-8 per hal,

and be thereafter subjected to re-settlement at Rupees 2-8 or upwards; a hal is about five acres, and I need not point out how much more, immediately and eventually, profitable to Government such a settlement is than that of the old Assam Rules, which gives a quarter of the area rent-free in perpetuity, and afterwards a rent-free tenure of fifteen years for the remainder, demanding only 3 annas per acre per annum for the same for the ensuing ten years, and 6 annas for the following seventy-four. The rent, moreover, of the District settlement is not redeemable unless hereafter expressly sanctioned, and security must be given for the annual payment of it. If Planters are willing to accept this tenure, as evident by the fifty-eight applications, it is an immense gain to Government to give it to them.

7. I send the boundaries of half a dozen of the applications as yet made taken indiscriminately. You will observe the indefiniteness of them. The “high hills,” when given to the north, represent that beautiful range which you must have observed in your visits towering above all the plain lands of the District; these hills bound all Cachar, and, although many grants interlie between these applications and the plains, all of which had already given the “high hills” as their northern boundary, still they have not been reached. This is indefinite enough. When “high hills” bound any other point of the compass they represent lower ranges which the applicant has never penetrated, and which are indefinite only in a smaller degree, perhaps five times the area of his grant lying between his application and them, or in some instances the grant may extend to the foot of them or to the top of them, or half-way up, all is unknown. There are generally two definite boundaries to an application, one being a well known river or stream, and the other applied for grants, and the fourth is usually “malproman,” which, being interpreted, means as far as is required to complete the applied for area. With two fair boundaries it is not difficult to project a compact square of a grant; but when, as in some cases, one of the definite ones is represented by a *khali* or *nullah*, to which a name is given, and this is recorded in no map, perhaps given arbitrarily by the Native deputed by the Planter to search for the land, it is very difficult indeed. None of these applications should in

any way be granted until a regular survey has been made, area approximately computed, and boundary pillars erected. The surveys of Native applications have hitherto been made at Government expense, applicants only clearing the boundaries. If Planters' applications are to be assimilated to them I would recommend the same procedure.

In conclusion I have to remark that the present applications being held in abeyance seriously affects the sale of waste lands in the District, for while in this stage they cannot be applied for under Sale Rules, the previous application existing, and also that, notwithstanding the withholding on my part of all guarantee that the lands applied for would be granted, some applicants have, I believe, commenced clearances on their applications, although assured by me that this would be at their own risk.

Translation of a Pottah under the Cultivation Rules.

From CAPTAIN R. STEWART, Superintendent of Cachar, to DOONA MEAH, son of JOBYE MEAH, Inhabitant of Mouzah Berwyah, Pergunnah Barrackpore, Zillah Cachar,—(dated the 31st January 1860.)

WHEREAS you have tendered a Kuboolent stating that you have agreed to have settled upon you the 3 hals, 4 kurs, 3 pans, 5 joits, and 13 puns of lands mentioned on the back of this pottah, as surveyed according to the Ameen's survey, in Pergunnah Burkholah, Zillah Cachar, for the period of twenty years, from 1266 B. S., this pottah is granted to you accordingly on the under-written conditions, viz.:—

That you will yourself, or by your Ryots, or Pykasta, clear and cultivate the said lands; that, as mentioned on the back of this pottah, the lands will be rent-free for the first three years, or from 1266 B. S.; that after the expiry of this period of three years the lands will be assessed in the following manner, viz.: for two years, or from 1269 B. S. to 1270 B. S., at Rupees 1-11-3 per annum; for the next five years, or from 1271 B. S. to 1275 B. S., at Rupees 3-6-7 per annum; then for five years, or from 1276 B. S. to 1280 B. S., at Rupees 6-13-3 per annum; and then for the remaining five years of the entire term of this pottah, or from 1281 B. S. to 1285 B. S., at Rupees 10-3-10 per annum; that you will pay the said rent according to the several instalments specified on the back of this pottah; that you will receive receipts from Government for the rent so paid; that without such receipts no objection on your part to the effect that you have paid the rent will be heard; that in paying the rent you will never bring any such objection as that the lands were not cultivated, or the crops were destroyed by accident, that if you do not, through your own negligence, clear the jungle lands or suffer the cultivated lands to become waste, still you shall pay the whole of the Government rent; that on your failure to pay the rent according to the due instalments, Government will have a full power and authority to realize the same by sale of your or your heir's moveable and immoveable property, or by any other means provided by the Regulations in force; that in doing so no adverse arguments of yours or of your heirs will be deemed valid; that in the

event of any land not included in this pottah being discovered in your possession you shall be liable to pay a separate rent such as Government may think proper for the same; that after the expiry of the period for which this pottah is granted the lands will be subject to re-settlement and to such moderate assessment as may seem proper to the Government; that you will, without any

objection, and without claiming any price at all, allow any portion of the said lands to be taken up for opening roads required by the Government or the public; and that on any serious misconduct on your part all the lands of the pottah will be resumed by Government under Board's letter No. 15, dated the 1st July 1858.

No. of Pottah.	No. of Former Settlement.	Names of Mouzah and Kittah.	No. of Dags.	Description of Land.	Total of Land.	Rate per Hal.	Total of Jum-mah.	Kistbundee.
					H.K.P.		Rs. As. P.	Rs. As. P.
						From 1266 to 1268 B. S., three years, rent-free.	...	From 1266 to 1268 B. S., three years, rent-free.
						From 1269 to 1270 B. S., two years, at 8 annas per annum.	1 11 3	From 1269 to 1270 B. S., two years— July ... 0 9 1 October ... 0 9 1 January ... 0 9 1 Total ... 1 11 3
31	...	Mouzah Slarbund.	149, 154, and 155	Jungle.	3 4 3 1. P. 6 13	From 1271 to 1275 B. S., for five years, 1 Rupee per annum.	3 6 7	From 1271 to 1275 B. S., five years— July ... 1 2 2 October ... 1 2 2 January ... 1 2 3 Total ... 3 6 7
						From 1276 to 1280 B. S., five years, at 2 Rupees per annum.	6 13 3	From 1276 to 1280 B. S., five years— July ... 2 4 5 October ... 2 4 5 January ... 2 4 5 Total ... 6 13 3
						From 1281 to 1285 B. S., five years, at 3 Rupees per annum.	10 3 10	From 1281 to 1285 B. S., five years— July ... 3 6 7 October ... 3 6 7 January ... 3 6 8 Total ... 10 3 10

APPLICATION No. 15.

Boundary:

East.—Bhootan Hills.
West.—Grant No. 165.
North.—Grants Nos. 210 and 193.
South.—As far as will complete the required area.

APPLICATION No. 19.

Chutla Haor.

Boundary:

East.—Dareem.
West.—Rooknie Nuddee.
North.—Grant No. 220.
South.—As far as will complete the area.

APPLICATION No. 20.

Kalain.

Boundary:

East.—Mr. Bucoot's Grant No. 225
West.—Applicant's Grant No. 89.
North.—High Hills.
South.—Settled lands of Merasdar

APPLICATION No. 25.

Boundary:

East.—Continuation of eastern boundary Grant No. 114 drawn northward.
West.—Continuation of western boundary Grant No. 147 drawn northward.
North.—As far as will complete the area.
South.—Grants Nos. 274, 114, and 147.

APPLICATION No. 40.

Pergunnah Kalain.

Boundary :

East.—As far as will complete the area.

West.—Road to Bhpoi Poonjee.

North and South.—High Hills.

APPLICATION No. 34.

Pergunnah Goomrah.

Boundary :

East and North.—High Hills.

West.—Grants belonging to Jelalpoor Tea Company and Messrs. Robert, Charriol and Company.
South.—Lands applied for by Mr. Davidson.

APPLICATION No. 35.

Pergunnah Vicrampoor.

Boundary :

East.—Horung Nuddeo.

West.—As far as will complete the area.

North.—High Hills.

South.—Mr. Holmes' Grant.

From W. GORDON YOUNG, Esq., Commissioner of the Chittagong Division, to the Secretary to the Board of Revenue, Lower Provinces,—(No. 21, dated the 17th May 1864.)

IN reply to your communication No. 16, dated 21st of March last, I have the honor to say that there can be little doubt that an extension to parts of the hilly tracts in and near this District of some such Rules as those referred to by Government will stimulate and hasten the clearance and cultivation of waste lands. At the same time I think that the conditions of the old Soonderbund Rules (of 1853) would be needlessly favorable to grantees and injurious to the public interests.

2. In communication with the Collector of Chittagong and the Superintendent of the Hill Tracts I have drafted the following Rules, which we think would answer every purpose and be of great advantage. It will be desirable that these, or some other Rules on the subject, be sanctioned as soon as possible to check unfounded expectations which already prevail to some extent in consequence of the recent discussion of the matter :—

Rules.

1. The Hill Superintendent (or Collector) will keep a Register of Lands "where clearance is much to be desired, but where, under the Waste Land Rules, it is not likely* to take place," the lots shall, as a general rule, not be in excess of 3,000 acres each, but, for special reasons, and with the Commissioner's sanction, larger lots may be entered in the Register. Any expenditure incurred by the Hill Superintendent (or Collector) for the demarcation or measurement of any lot to be noted and to be eventually defrayed by the grantee.

2. The applications for such lands to be advertised, and otherwise dealt with preparatory to auction, as under the Waste Land Rules.

3. At the expiration of the period noted in the advertisement, or after disposal under Act XXIII. of 1863, if any objections brought forward, the Hill Superintendent Collector to put up the land to auction, either for sale in fee-simple under the Waste Land Rules, or for settlement under the following conditions, according to whichever plan he may, at the time, think most conducive to the public interests :—

Conditions of Settlement.

(A.) One anna an acre to be paid for the first five years†, two annas for the second five years, three annas for the third, and so on till the maximum of six annas is reached after twenty-five years.

(B.) The conditions of the Waste Land Rules as to erection of boundary marks, (Section XIV.,) reservation of roads, tow-paths, and waterways, (Sections III. and VIII.,) and return of money deposits (Section XIII.) to be applicable to such grants.

(C.) At any time, after the third year, a re-survey, or exact survey of the land of which actual possession has been awarded, may be claimed either by the Government or the grantee as under the Soonderbund Rules of 1853.

(D.) The grantee to be at liberty to redeem his revenue according to the Rules in force at any time after such re-survey may have taken place, or may have been declared by the Hill Superintendent Collector to be unnecessary.

Remarks.

* It is only in such cases that the favorable terms contemplated by the new Rules seem necessary or desirable. In eligible spots grants will be taken up under the Waste Land Rules, but in remoter parts the new Rules may properly be made use of.

† No deduction of rent-paying area is necessary for Tanks, Bunds, &c., as in the Soonderbund Rules.

‡ None of the Local Authorities think it necessary to have any rent-free period. Such a condition would probably lead to the land being locked up for years by persons not intending to cultivate it. The rent payments here prescribed will insure the utilization of the land and render unnecessary any vexatious stipulations or investigations as to clearance year by year.

§ This is to enable the Superintendent or Collector to effect the settlement, in the first instance, on a very rough estimate of area.

From the Hon'ble A. EDEN, Secretary to the Government of Bengal, to the Secretary to the Board of Revenue, Lower Provinces,—(No. 1765T., dated Darjeeling, the 22nd July 1864.)

I AM directed by the Lieutenant-Governor to acknowledge receipt of your letter No. 232, dated the 27th ultimo, and in reply to observe as follows:—

2. The Board now explain that the Cachar cultivation leases of waste land, though temporary as regards assessment, do, in terms, convey to the lessee a right of re-settlement on the expiry of the lease, subject only to such moderate assessment as the Government may think proper to impose, and that even if there were a clause in the leases providing that they confer no right of occupancy beyond the period of the lease, and that, on the expiry of the lease, the Government is free to enter as landlord, and dispose of the land as it pleases, it would still be impossible in practice, and unadvisable as a matter of policy, to deny to a leaseholder who had, upon a long lease, at his own expense, brought waste land into cultivation the right of re-settlement at a moderate jumma.

3. In other words, the Board are of opinion that the cultivation leases of waste land in Cachar practically convey to the lessee a proprietary and transferable right in the land, subject only to re-settlement (temporarily or permanently at the option of the Government) on the expiry of the lease, and that it is right and expedient that this should be so. In this conclusion the Lieutenant-Governor, on full consideration, concurs. So long as it was doubtful whether the ordinary leases of waste lands for rice cultivation conferred a right of occupancy or proprietorship beyond the period of the lease, the Lieutenant-Governor was strongly opposed to the grant of more favorable terms to European Tea Planters, but he fully agrees with the Board that it is entirely out of the question to refuse to European Planters leases of waste land on the same terms as those on which such land is leased to Native cultivators.

4. The Authorities in Assam and Cachar justly observe that leases granted on these terms, at what are called the current rates of the District, low as these now are, must be far more profitable to the Government than the absolute sale of the land, while, if it be more convenient to the Planters to take the land on these leases instead of purchasing it, the Lieutenant-Governor can see no reason whatever why they should not be allowed to have their choice.

5. The Lieutenant-Governor fails to trace anything in the Secretary of State's Despatch of the 9th July 1862, which renders the disposal of waste land by sale, and by sale alone, compulsory. The Board are, no doubt, right in supposing that the object of the Secretary of State, in sanctioning the sale of waste land in fee-simple, was only to consult the wishes of English Capitalists, and that it would be contrary to the policy of Her Majesty's Government to discourage these gentlemen from taking such land on ordinary proprietary leases subject to periodical re-settlement of the Revenue if they prefer them to a fee-simple tenure. And the readiness with which the Government of India acceded to the proposal of the Lieutenant-Governor temporarily to revive the old Rules in a modified shape in favor of applicants for waste land in Chittagong and Soonderbuns is sufficient proof that the same view is entertained by the Governor General in Council. The only reason for abrogating the old Rules for the grant

of waste land when the new Rules were passed was that, if the two had remained in force together, when it was probable that waste land could be sold for more than the minimum price, the public would have been able to defeat the object of the new Rules by applying for lands under the old Rules, and then immediately redeeming them under the new for less than they would have had to pay at an auction sale; but this argument does not apply to cultivation leases for a limited period subject to re-settlement, for the revenue of such leases cannot be redeemed, except hereafter when the land shall be fully assessed, and then only under such Rules as may be passed for the general redemption of the land revenue.

6. The Lieutenant-Governor therefore approves of the Board's proposal to direct the grant of these leases for twenty or even thirty years at current rates, not only in Cachar but in Sylhet, Assam, and Chittagong, and also, if there be no objection, in Darjeeling; but it must be distinctly understood that such leases can be given only of waste land for which there is no application for purchase; that no lease can be given for more than 3,000 acres of land; that all the conditions required under the new Rules as to survey, demarcation, reservation of tow-paths, and so forth must be observed in the case of lands taken on lease; that although such leases confer a transferable and proprietary right on the lessee and entitle him to re-settlement at a moderate jumma, they are not redeemable under the Waste Land Rules; and that the rights of the lessee in the land as well as all other property belonging to him are liable to sale for non-payment of revenue. It will be better, however, to adhere to the ordinary form of lease in use in the Mofussil, modified as the Board may think fit to direct, instead of having a more formal document prepared by the Law Officers.

7. The Lieutenant-Governor is unable to agree with the Board in considering that provisions of Act XXIII. of 1863 are applicable to these cultivation leases. If application is made to purchase any waste land in fee-simple the provisions of that Law must of course be strictly observed. But it would be going beyond the intention of the Law to apply its provisions to leases of a kind which, though existing at the time when the Law was enacted, was not within the purview of the legislature, while it would be intolerably inconvenient and obstructive if every Ryot, who sought to bring into cultivation a few beegahs of waste land, were required to conform to the intricate provisions of the Act; it would be equally unjust to European Planters to impose upon them conditions from which ordinary Ryots are exempt.

8. Collectors can always satisfy themselves whether land applied for as waste land is really so or not, and the claims of all persons who may possibly have an interest in such lands should be expressly reserved by a clause in the lease, and will be upheld in the Ordinary Courts. Any such claims which may be established must of course be respected by the lessee, and will be duly recorded at the time of re-settlement. The object of the Act was to confer on purchasers of waste lands a clear and unambiguous title rather than to afford special protection to rights which can be maintained by the ordinary operation of the Law.

9. The Lieutenant-Governor does not think it requisite that applications for leases should be advertised, or that the leases should be put up to sale. If the rates are properly adjusted the leases

will, from the first, be required to pay a fair equivalent for the purchase money in the shape of rent, and at the end of his lease he will be subject to a full assessment. By dispensing with the auction sale the grievance which is felt by applicants who, after expending time, money, and labor in finding land, are outbid for it at auction by wealthier speculators will, to a certain extent, be redressed, while at the same time the rights of the public will be amply protected not only by the assessment, but by the reservation from lease of lands for which a purchaser is forthcoming.

10. It is very necessary, however, that the "current rates" of the Districts in which these leases are granted should be accurately ascertained and carefully revised. The rates should in all cases be such as, while securing to the Government a fair and moderate revenue, should not in any degree operate to discourage the clearance of waste land either by Ryots or by Planters. This is a point of importance which demands the Board's close attention. It has been too much the custom in the unsettled Districts to adopt one uniform rate of assessment on large tracts of country without reference to the capabilities of different soils, or the comparative advantages of different localities, and the consequence of this wholesale kind of assessment is that the rates are no higher than the worst situated and least productive lands under cultivation can bear, and the more fertile and best situated lands are inadequately assessed. This remark applies with the greatest force to cultivated lands in process of re-settlement, but it can hardly be doubted that in the case even of waste lands some discrimination is practicable and proper, and that in giving leases of such land the rates should be adjusted according to local circumstances. It may, perhaps, be advisable in all cases to allow a short rent-free term not exceeding two or three years with a view to the speedy clearance of the land, though no right to such a privilege can be alleged, but the increasing revenue of subsequent years need not in all cases be the same.

11. The grounds upon which the Lieutenant-Governor proposed to the Government of India to revive for a time the old Rules in a modified shape in the Soonderbuns and Chittagong are stated at length in the Secretary's letter to the Government of India, No. 659, dated 17th February 1864, of which a copy was furnished to the Board with Mr. Bayley's letter No. 1014, dated the 11th March last, and they have been more fully explained in my letter No. 1358T. of the 7th instant. If it be the case, as the Board now report, that waste lands in Chittagong are not unsaleable at the minimum price, the reasons for reviving the old Rules no longer exist, and, as the Local Authorities will now be able, under the sanction conveyed in this letter, to give terminable leases conveying a right to re-settlement, the necessity for passing any special Rules for Chittagong may have been obviated. On this subject the Commissioner of Chittagong (who has forwarded direct to Government paragraph 2 of his letter to the Board, No. 85, dated the 31st instant) may be asked for a further expression of his opinion. He may at the same time, if the Board see no objection, be authorized to give cultivation leases for thirty years on the terms more explained at the rates proposed in the said Rules.

From the Hon^{ble} A. ENAY, Secretary to the Government of Bengal, to the Secretary to the Board of Revenue, Lower Provinces,—(No. 2347T., dated Darjeeling, the 13th August 1864.)

I am directed to acknowledge the receipt of your letter No. 290, dated the 22nd ultimo, with enclosure, on the subject of the grant of rent-free leases in the Chittagong Division, and in reply to say that the Lieutenant-Governor agrees with Mr. Young that where a rent-free term is not necessary it should not be allowed.

2. The point as to the grant of leases rent-free for a few years or otherwise has, I am to observe, been left open in paragraph 10 of the Orders of the 22nd July last, No. 1765T., and in paragraph 11 of those Orders the Commissioner has been authorized to give leases on terms which do not include a rent-free term.

3. The question is one, I am to say, to be determined by the Board in settling the "current rates" with reference to the demand for waste lands and other circumstances.

From R. B. CHAPMAN, ESQ., Secretary to the Board of Revenue, Lower Provinces, to the Secretary to the Government of Bengal,—(No. 324, dated the 15th August 1864.)

IN acknowledging the receipt of Government Order No. 1765T., dated 22nd ultimo, received only on the 3rd instant, I am directed by the Board of Revenue to submit, for the

sanction of the Government, the Rules that they propose to publish for the grant of leases for the cultivation of waste lands.

2. The Board have not provided for the limitation of the operation of the Rules to any locality whatever, and they see no necessity for doing so. The provision of the VIIIth Rule for regulating the standard District rate from time to time seems to afford a sufficient security against any loss arising to the public exchequer from the introduction of the Rules in Districts where the land is already or may become saleable at a high price.

3. The Board have not thought it necessary to perpetuate a condition of the existing leases by which the right to take land required for the construction of roads is reserved. There is no such reservation in the Sale Rules, and the Board think that it is more reasonable that such cases should be left to be dealt with as they arise under the general Law for such cases provided.

4. The Board are glad to find that the Lieutenant-Governor is of opinion that the provisions of Act XXIII. of 1863 need not be applied to the case of these leases. There can be no doubt of the inexpediency of so applying the Act if it can be avoided; but the phraseology of the Act seemed, and still seems, to the Board to forbid the interpretation put upon it by the Government.

5. The Board have provided for a local advertisement only of applications under these Rules. This local advertisement is according to existing Rule, and it seems to be quite necessary.

6. The Board trust that the Government will approve of the provision made by the Rules for the revision from time to time of the District rates, and for the assessment of special rates in special cases. While the Board quite agree with the Government that it is desirable that there should be the power of assessing such special

rates, they think that one standard rate should be adopted as the Rule. It must be remembered that all the most accessible lands have been already taken up, and there is probably no room for great diversity of rates in the remaining lands. If the Government approve of the Rules the Board will obtain at once from the different Districts the information necessary to enable them to fix the present standard District rate in each case.

7. The Board have thought it right to limit the eventual permanent assessment upon lands leased under these Rules to eight times the standard rate that may be current at the time of re-settlement. There can be no doubt of the expediency of limiting the eventual demand of the State at once so far as as it can be done consistently with the public interest. It is hoped also that the provision for the resumption of any large portion of the lands that may be uncultivated may be approved; it is devised to prevent the land being locked up.

8. Under Rule V. the Board propose to make applicants pay for the survey of lands already surveyed, as well as of those that may be surveyed specially in consequence of their applications. When the land is sold by auction it may be expected that the cost of surveying (if the land has been already surveyed) will be paid in an enhanced price, but this cannot be the case in lands leased; yet there seems no reason why lessees should not reimburse to the Government the cost of surveying.

9. The Board trust that, notwithstanding the instructions contained in the close of the 7th paragraph of the Government Order under reply, they may be permitted to procure a form of lease from the Government Law Officers. The provisions of these leases will be necessarily somewhat complicated; many English Capitalists will probably take advantage of them, and it will certainly be more satisfactory to have a proper legal document prepared.

Under instructions from the Government of Bengal the following Rules are to be introduced after Rule 21 of the Rules for the sale of unassessed Waste Lands in the Lower Provinces of Bengal; Rules 22 and 23 will then become Rules 23 and 24 respectively:—

RULES FOR THE GRANT OF LEASES OF WASTE LAND.

22. Leases to cultivate any of the lands described in Rule I., no application for the purchase of which has been received, may be granted under the following Rules:—

I. Applications for leases to cultivate waste lands shall be made in the manner, and shall contain the particulars, prescribed in Rule 4.

Such applications shall be entered immediately in a separate Register to be numbered 35A., which is to be in the Form of Business Register No. 35, with the omission only of the words "of sale" in Heading 11, and the substitution of "lease" for "sale" in Heading 12.

II. The provisions of Rule 2 as to area, and of Rule 3 as to shape, compactness, survey, demarcation, and the like, are to be enforced in respect to applications for leases to cultivate waste lands.

III. If the Collector is satisfied that the land applied for is available for lease, and may be properly granted with reference to the requirements of the preceding Rule II., he shall advertise the

applications for the period of thirty days. The advertisement (which shall be in the Form L. appended to these Rules) shall be published in the Collector's Office, in the Court of the Principal Judicial Officer of the District, at the Moonsiff's Court, and Police Station within the jurisdiction of which the lands are situate, and at such appropriate places in the villages adjacent to the lands as may to the Collector seem fitting. Only the cost, if any, of posting or issuing these Notices shall be levied from applicants.

IV. The procedure and provisions of Act XXIII. of 1863 are not to be applied in the case of applications for leases to cultivate. But if, before the expiration of the period fixed in the advertisement, any claims to the property in or use of the lands are preferred, the Collector will deal with such claims as he may think right, either rejecting the application for lease altogether, or making, in the lease, such special reservation in favor of the claimant as may be necessary. Any claimants that may appear after the expiry of the period of advertisement must be referred to the ordinary Civil Courts for the establishment of their alleged rights against the Government and the lessee.

V. If, during the period of advertisement, no objection to the lease of the lands is presented, or if it is found that any objection that is presented is not incompatible with the lease of the lands, the Collector shall, whether the lands have been surveyed, mapped, and demarcated or not, require the applicant to deposit the cost of survey and of clearing the boundaries calculated in the manner prescribed in Rule 6.

VI. If the lands have been already surveyed, mapped, and demarcated, the Collector shall then proceed to make the lease at once; if otherwise he shall, with all convenient speed, cause the needful survey, mapping, and demarcation to be effected, and, as soon as this is done, shall make the lease of the lands. In either case the lease is to be upon the following conditions:—

- (a.) The term of the lease to be thirty years.
- (b.) The rent per acre to be

For the first three years ...	Nil.
For the fourth and four following years ...	One rate.
For the ninth and four following years ...	Two rates.
For the fourteenth and four following years ...	Four rates.
For the nineteenth year and thereafter to the end of the lease, or till re-settlement	Six rates.

(c.) At the end of the thirty years' settlement, if three quarters of the land are cultivated, the whole will be re-settled permanently with the original lessee, if he so desire it, at a rent not exceeding eight times the rate then current under these Rules, or if no such rate is then extant, at such rate as may, at that time, appear to the Government to be moderate and reasonable. If less than three quarters of the area is cultivated, then only the lands cultivated will be so re-settled with the lessee. The cultivated area will include houses, buildings, and any tracts containing timber or fire-wood left uncultivated with the recorded sanction of the Collector.

(d.) The right to the use of navigable rivers and streams and a tow-path twenty feet in width on either bank to be reserved as provided in the

Form of Deed for the sale of waste lands, Form D.

(e.) Any existing private rights of occupancy, &c., to be reserved.

(f.) The lessee to erect such substantial boundary marks within such time as the Collector may require, and thereafter to keep them in good order on pain of cancellation of his lease.

(g.) The lessee to give every assistance to the Officers deputed to survey the land at any time.

(h.) The provisions of Rule 18, as to boundaries, &c., to be applicable to the case of lands leased under these Rules. The rent to be re-adjusted upon any alteration of boundaries.

(i.) Any arrears of rent to be recoverable by sale of the tenure under the Law for the time being in force for the sale of under-tenures for their own arrears, and, if that does not suffice, by sale of any other property of the defaulter.

VII. A standard District rate will be fixed for each District by the Board of Revenue and raised or lowered from time to time, as occasion may require; but it will be the duty of the Collector, in making a lease, to depart from this rate whenever the special circumstances, (e. g., advantages or disadvantages of soil or locality), of the lands applied for seem to require it; provided that it shall not be competent to him to conclude a lease at a rate *lower* than the standard District rate without the special sanction of the Board of Revenue.

IX. It is to be most clearly understood that the rent payable under these cultivation leases is not redeemable under Rule 19.

From the HON'BLE A. EDEN, for Junior Secretary to the Government of Bengal, to the Secretary to the Board of Revenue,—(No. 4036T., dated Darjeeling, the 7th October 1864.)

I AM directed to acknowledge the receipt of your No. 324, dated 15th August last, submitting the Rules for regulating the grant of cultivation leases of waste lands which the Board propose to publish.

2. In reply I am to state that the Lieutenant-Governor sees no occasion for passing formal and

elaborate Rules for the grant of cultivation leases, especially as such Rules will be applicable to small patches of land given to Ryots for their own cultivation, as well as to large tracts assigned to Tea Planters and other Capitalists.

3. His Honor is of opinion that these cultivation leases should be given as heretofore by the Local Authorities at current rates in the same form as has hitherto been in use, modified only so far as, if necessary, to express more distinctly the right of the lessee to re-settlement at a moderate jumma. The current rates for each District or particular portion of a District should be settled by the Board after communication with the Local Authorities, care being taken that the rates are not such as discourage the clearance of waste land, while, at the same time, the public revenue is not unduly sacrificed.

4. The Lieutenant-Governor does not think that any absolute limit should be put upon the rates of assessment to be adopted at the renewal of the settlement, but the lessees may be assured that the assessment will never exceed one-half of the gross rental calculated either on the actual assets or on a fair estimate of what the Estate may be worth to let. Nor does His Honor think that the promise of granting a permanent settlement after thirty years should be made a condition of the lease. A promise of re-settlement at the end of that period on a moderate jumma is sufficient. Whether the settlement shall be permanent or temporary should be left to be determined by the Government of the day.

5. The Lieutenant-Governor still retains his objection to formal leases prepared by English Lawyers. Such documents would be wholly inapplicable to leases given to Native Ryots for their own cultivation, and it is better that no distinction should be made. European Tea Planters have hitherto been quite satisfied with the leases granted by the District Officers. These leases are binding upon the Government, and there is no reason why they should assume a more formal character.



SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, DECEMBER 21, 1864.

OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE will henceforward be published, containing such Official Papers and Information as the Government of Bengal may deem to be of interest to the Public, and such as may usefully be made known.

Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on a payment of six Rupees per annum if delivered in Calcutta, or twelve Rupees if sent by Post.

No Official Orders or Notifications, the publication of which in the GAZETTE is required by Law, or which it has been customary to publish in the GAZETTE, will be included in the SUPPLEMENT. For such Orders and Notifications the body of the GAZETTE must be looked to as heretofore.

Report of the Commissioner of Burdwan on the abatement of the Epidemic in Dwarbasiny.

From C. F. MONTRESOR, Esq., Commissioner for the Division of Burdwan, to the Under-Secretary to the Government of Bengal,—(No. 172, dated the 29th November 1864.)

I HAVE the honor to acknowledge the receipt of your letter No. 4274 of the 17th ultimo, with annexure, and in reply beg to report that, in consequence of the opinion given by Baboo Degumber Mitter, a Member of the Epidemic Commission, in a Memorandum appended to the Report of the Commission, that the virulence of the Epidemic in Dwarbasiny was due to the obstruction of the drainage of a large jheel to the north-east of that village, a drain was cut during the past hot weather, at an expense of about Rupees 120, to convey the water that would otherwise have stagnated in the jheel, into a large khal which runs into the Kedarmutty River; while three pukka culverts were also constructed on the Hooghly Road which obstructed the drainage of the jheel to enable the water to drain through to the lower grounds on the other side. The total expense incurred was Rupees 318-4-6.

2. Baboo Joykissen Mookerjee, Zemindar of the village, exercised a general supervision over the work. He considered that the quantity of water that would remain in the hollow centre of the jheel after a large quantity had been carried off to the river would afford the inhabitants the means of irrigating their tacks. The water that would collect in the centre of the jheel, it was surmised, would not dry up and no moist surface would be exposed to the rays of the sun.

3. The benefit that has resulted from these improvements in drainage, though unquestionable, has not been such as to induce me to attribute to

defective drainage alone the prevalence of sickness in Dwarbasiny. A decided improvement in the health of the villagers is reported by Baboo Joykissen Mookerjee to have taken place. There has been no fresh appearance of disease during the present year, and the only sufferers are those labouring under old fever or enlargement of the spleen induced by chronic disease. This state of things is to be attributed partly to ordinary sanitary measures adopted in Dwarbasiny as well as to a greater precaution being taken by the villagers in regard to their food, drinking water, and clothing.

Papers regarding the Epidemic Fever in Nuddea and the 24-Pergunnahs.

From H. L. DAMPIER, Esq., Commissioner of the Nuddea Division, to the Secretary to the Government of Bengal,—(No. 219, dated the 18th October 1864.)

I HAVE the honor to report on the operations of the past season for the mitigation and prevention of the Epidemic in the 24-Pergunnahs and Nuddea, as required by paragraph 12 *et. seq.* of the orders communicated with Government order No. 1479T., dated 12th July 1864.

2. On receipt of Government order No. 886, dated 22nd of February 1864, I authorized the Magistrates to appoint Overseers and to carry on the clearing and draining operations without loss of time, warning them against the error of cutting down jungle instead of uprooting it, and pointing out the necessity of destroying the jungle which they uprooted instead of leaving it to rot in the villages.

3. At the same time I requested that Estimates might be prepared and sent in without delay, shewing how much they would probably require before the rains "for such works as opening out drainage channels, re-digging tanks for drinking purposes, clearing away vegetation which overhangs tanks and renders the water impure, compensating the really poor for the injury to their property which may be unavoidable, and effecting clearances on the premises belonging to indigent occupants." Those who were in a position to do so were to be made to clear their own lands by the issue of Notices under Section 62.

4. Operations were not to be delayed pending the submission of the Estimates. I wrote: "Simultaneously with the preparation of the Estimates you are authorized to commence on such works as you consider necessary. Where you have any money at your disposal from Local Funds the expenditure will be made from them, otherwise you are authorized to draw upon the sums assigned to your Sub-Divisions in the 26th paragraph of my letter No. 2Ct., dated 4th January 1864."

5. These instructions were issued to the Magistrates on the 27th of February; in the 24-Pergunnahs they were communicated to the Sub-Divisional Officers on the 18th of April, Mr. Cockerell having awaited the issue of the Epidemic Committee's Report which was daily expected.

6. No Estimates were submitted for the 24-Pergunnahs, but the Officers worked on the sums which they were authorized to expend under the permission quoted in paragraph 4 above.

7. In Baraset four Overseers were appointed to Nyehatty, Kutwallee, Tabbaberia, and Kudumgatchee Lines. The Nyehatty Overseer cleared the villages from Kanchraparah down to Nyehatty. Mr Stevens visited them and reports that, though this Overseer, Greesh Chunder Mookerjee, had done so much, not a single complaint was made against him. This man worked under Mr. Harrison in the previous season, and his management gives so much satisfaction that I have, at the Magistrate's recommendation, sanctioned his retention through the rains to prepare the way for the operations which will be taken in hand after their close.

8. Both the Sub-Divisional Officers at Baraset and the Cantonment Magistrate of Barrackpore complain that the Railway and Road Embankments have affected the drainage, but as Lieutenant Hills is now employed on the special duty of reporting on this subject it need not be noticed further here.

9. Mr. Stevens, writing in August, reports a great improvement in the health of Baraset as compared with the corresponding period of the previous years, but it is even yet too early in the season to hazard an opinion that the severity of the visitation is abating.

10. To the Overseer of the Kutwallee Circle, Kamikha Doss Mitter, were entrusted Baraset Station and the portion of the Kudumgatchee Thannah which lies to the west side of the Calcutta and Jessore Road. He did his work badly and unsatisfactorily both to the Sub-Divisional Officer and to the people. Greesh Chunder was brought into Baraset late in the season and worked with great vigor.

11. The Overseer of the Kudumgatchee Circle cleared the villages of Badoo Moheshurpore, Nulkoorah, Oramon, Moarah, Katoor, &c., where the Epidemic was very bad last year.

12. In the Tabbaberia Circle Taldangah, Rajibpore, Nowaparah, Dignah, and other villages were cleared.

13. Mr. Stevens writes:—

"From what I have seen and heard, I think that the Natives are becoming convinced of the value of the sanitary measures. All with whom I have conversed on the subject agree in wishing that the operations should commence in October or November. Were the ground cleared in either of those months the villagers would in all probability sow cold weather crops where the nature of the land permitted. If the land were once brought under cultivation in this manner it is not likely that it would be suffered to relapse into its former state. If I might be permitted to offer an opinion, I should very strongly recommend that the clearance operations be resumed immediately after the rains.

"I am informed that the largely increased cultivation of jute has indirectly caused much annoyance and sickness. The villagers appear to be in the habit of macerating the plant in order to procure the fibre in the nearest ditch or tank to the spot on which it is grown. I am told that the stench arising from this is almost intolerable, and the Sub-Assistant Surgeon gives it as his opinion that the Epidemic here is much aggravated by this nuisance. The cultivation of jute is now very general here, and it will be by no means easy to prevent the ill-effects above referred to."

14. The Magistrate will be requested to put Section 62 in operation against the nuisance being committed near the villages.

15. In Barrackpore Major Sneyd reports:—

"There is a great deal, indeed, required to be done before the villages in or about this Cantonment could be rendered what could be desired. But on the whole the people seem desirous to do what they can, and I think that, if half of the expense for clearing, drainage, and the improvement of roads were advanced by the Government, that the influential people in villages might be induced to collect a like sum, so that the burden might be borne equally."

16. Major Sneyd commenced his operations in the immediate neighbourhood of the two Bazars, one of which is on each side of the Cantonment, and has done all he could, with the means at this disposal, for the improvement of drainage in the vicinity of these Bazars. But he points out many points in which it is defective, and which it is beyond his power to remedy. I have forwarded copy of the remarks to Lieutenant Hills, and have requested him to report on the subject after taking any levels which may be necessary.

17. In the Cantonment itself every possible precaution is taken to secure effective drainage, and on the whole it is pronounced to be imperfect in a few places only.

18. Major Sneyd urges the necessity of establishing latrines for the Cantonment and Bazars, and remarks that the absence of these provides the means of fattening droves of pigs

for the Calcutta market. The subject of latrines will more properly be considered in connection with the Rules for Cantonment Conservancy which are now under preparation. Copy of Major Sneyd's remarks will be forwarded to the Chairman of the Calcutta Justices for the purposes of his Health Officer.

19. Of the operations in the Dum-Dum Sub-Division I extract an account from Major Wintle's Report:—"The jungle-clearance operations have been strictly carried out in accordance with the orders of Government; Notices were in the first instance issued to the different villages through their respective Gomastahs, and these have been and will be steadily issued. My principle all through has been to make the villagers do as much as possible for themselves as far as the clearance of jungle has been concerned; in fact, in only a few instances has my assistance been required in procuring labourers, the expense of paying them being borne by the applicants. In cases where my orders have not been carried out the delinquents have been brought under the provisions of Section 188 of the Indian Penal Code, and, as sanctioned, the fines levied have been put into the General Fund.

"The jungle has been uprooted as much as possible instead of being merely cut down, but the nature of most of the wild plants in Bengal is of such a nature that many of them are only increased by being interfered with; amongst others I may mention the principal ones, the Bharandah, Kutchoo, and Cheeta; these are very difficult to eradicate.

"As regards drainages the order was received too late in the year to effect much, but I at once, in accordance with the permission conveyed in paragraph 22 of the Commissioner's letter No. 2Ct., dated 4th January 1864, appointed an Overseer on Rupees 40 a month; but this individual, after committing himself in his village, absconded, and the work put into his hands was consequently delayed, as I could not procure a competent person to supply his place. One of the works that required immediate attention was the outlet running from the jheel to the south-east of Cantonments to the Salt Water Lakes through the villages of Hatteearrah and Nowaparrah, but the sudden and heavy fall which ushered in the rains put an entire stop to further operation; this, however, I shall re-commence as soon as the waters subside. This cut drains a large tract of the Sub-Division, and any obstruction in it would flood Cantonments. The natural inclination of the country about Cantonments is towards this point.

"The next in importance is the Village of Kadhihatty, on the banks of the Nowie Nuddee, a large and the best populated village in the Sub-Division. This village required some care in the preparation of the Estimates and Plan, consequently I entrusted it to Messrs. G. Brothers and Co., Professional Engineers. I enclose their Plan and Estimates of these villages, and if it be approved of, I intend making over any further drainage operations to them. I may as well state that the other villages will not require so large a sum.

"I must again bring to notice the state of the Nowie Nuddee; this I reported in a former letter and recommended that a professional person should be sent to carry out the improvements, but nothing whatever has been done to it. I certainly cleared it of all jungle as far as could be done, but it requires a thorough clearance and levelling; this would increase the already small traffic on it during the rainy season, the expenses being met by the establishment of Ferries. This khal has been largely encroached upon, and until last year when I prohibited the practice the different villages through or near which it ran were in the habit of raising bamboo 'bours' for fishing purposes, thereby obstructing the ready flow of water.

"The tanks throughout the different villages have been to a large extent cleared, but it is a difficult matter to keep them so; a few have been re-dug, and the earth taken from them made use of in raising low localities; this has been effected by the owners themselves.

"There is no doubt that the Epidemic, the little that there was in the District, has greatly abated, and that it may, in a great measure, be attributed to the sanitary measures adopted; but I am sorry to say that the Village of Kadhihatty, in which the largest amount of clearances has been effected, has been severely attacked by cholera, upwards of fifty people having been carried off."

20. Major Wintle's management of these operations appears to be very judicious, and he devotes himself to them with great interest and zeal. I saw some of his villages last year.

21. The remarks regarding the extensive drainage operations and the Nowie Nuddee have been communicated to Lieutenant Hills, who will be requested to consult with Major Wintle and to embody in his Drainage Reports such recommendations as may seem good for this part of the country.

22. I annex an Abstract Statement shewing the money which passed through each Officer's hands from May to August 1864 when the operations ceased. It will be seen that the sums made available to the three Sub-Divisional Officers amounted to Rupees 2,612-9-7, made up as follows:—

	Rs.	As.	P.
Balance in hand of last year ..	783	2	4
Raised by Subscriptions ...	490	1	9
Public Money ..	1,339	14	9
Total Rs. ...	2,613	2	10

23. Out of this Rupees 2,140-12 have been expended and Rupees 472-6-10 remain in hand from the subscriptions to be expended next season.

24. Formal sanction is now requested for the adjustment of the Rupees 1,338-14-9, of which Rupees 339-14-9 only is in excess of the sums for the expenditure of which authority was asked in paragraphs 22 to 26 of my Report No. 2Ct., dated 4th January 1864, and granted in paragraph 6 of Government order No. 886, dated 22nd February 1864.

25. I proceed to report on the Nuldea District.

26. The Magistrate writes:—

"Immediately on receipt of your letter (of February 27th) I forwarded copies of it to the Sub-Divisional Officers of the Sudder Sub-Division, Ranaghat, Meherpore, and Bongong, with orders to prepare and submit Estimates without delay, and to follow your instructions as to issue of notices for uprooting jungle, &c.

"From time to time Estimates have been received, and I have, after giving them the best consideration in my power, authorised the expenditure in each Sub-Division of a sum not exceeding the limits prescribed for each in your letter. Sanitary operations within this limit have been proceeding steadily simultaneously with the issue of Notices under Section 62 of the Criminal Procedure Code." Estimates were submitted, amounting to about Rupees 15,000, for the District, of which it was expected that a considerable portion would be raised by subscription. Much of the estimated expenditure was for the re-digging and cleaning of tanks, and as the Estimates were not in my hands till the end of May I wrote:—

"The season is now so far advanced that it is useless to submit to Government any Estimates for works, such as for re-digging tanks, &c., which have not already been executed. I will therefore await the Report promised in your 6th paragraph shewing the works which have been executed up to date, the cost incurred, and the probable further expense which can be incurred before the rains put a stop to operations."

27. Mr. Grey's completion Report is now before me. He writes:—"I proceed to state what has been done in each Sub-Division. Details as to cost, &c., will be found in the annexed Memorandum referred to in paragraph 2 of this letter.

"*Ranaghat Sub-Division.*—At Santipore some of the public roads and thoroughfares have been metalled and several ones widened and elevated. Pucca drains have been constructed, and the town has been almost thoroughly stripped of its noxious jungles. In the heart of the town four tanks have been dug by private parties, whose names are mentioned in the list herewith annexed.

"At Beernuggur seven tanks were dug and enlarged, several water-holes have been filled up, and some drains cut, and the town, which had for some years been overspread with dense jungle and raw vegetation, has been completely cleaned.

"At Ranaghat all the roads, almost without exception, have been considerably improved, some newly made, and one is being metalled. Three new tanks were dug by private individuals (whose names are also given.) Drains have been excavated which so fully take away all rain water that after a shower every road may be walked upon without discomfort, and scarcely any jungle is to be seen in the town.

"The above extracts are taken from the Report of the Sub-Divisional Officer. Though the raining

and metalling of roads may not at first sight appear to be a work of a sanitary nature, yet it certainly is such to a certain extent. The kutchas lanes found in all Native towns are, I believe a fruitful source of miasm, and metalling must to a certain extent diminish the cause of disease. The raising of earthen roads proceeds simultaneously with drainage on each side of the road, and hence tends to diminish the unhealthiness of the place.

"At Simla and other villages nothing has been done pending the final reply to my letter No. 240 of May 11th, the inhabitants being too poor to undertake the contribution of any but trifling sums. 631 Notices under Section 62 of the Criminal Procedure Code have been issued for the improvement of the Towns of Ranaghat, Santipore, Beernuggur, and Khistna."

"*Sudder Sub-Division.*—Improvements in drainage have been effected in the town of Kishnagur and in certain villages. The Joint Magistrate, in his letter of the 5th July, says:—"I have lately also issued instructions regarding cutting and burning of jungle as well as drainage, and both works seem to be progressing favorably." He also reports that, in addition to Rupees 332 raised by private subscriptions in the villages mentioned, "the inhabitants of other villages are now coming forward with subscriptions."

"Notices under Section 62 were issued in this Sub-Division against twenty-two persons."

"*Bongong Sub-Division.*—The Sub-Divisional Officer reports that 615 Notices were issued under Section 62; two tanks in Echapore, one in Chughurria, one in Bongong, and one in Bagoory were re-dug; drainage channels in the Villages of Bongong and Chughurria were opened; the Villages of Echapore, Chughurria, Bongong, Bagoory, and Bagashara were cleared of jungles, and the rivers below Chughurria and Echapore were cleared of weeds. Another tank in Chughurria and one in Bongong were re-dug at the expense of the proprietors."

"*Meherpore Sub-Division.*—The Sub-Divisional Officer reports as follows:—

"The low jungle has been cleared to a considerable extent within Meherpore by the inhabitants.

"Two gharries, paid for out of the sum allotted, were sent round to remove to a suitable place the jungle cut down by the villagers.

"Ten coolies under the ticca Overseer assisted those Ryots who were unable to clear their own jungle through sickness or poverty.

"The Zemindars have been very backward in aiding Government in these operations.

"Notices under Section 62 of the Criminal Procedure Code were issued.

"With reference to the Sub-Divisional Officer's complaint of the backwardness of the Zemindars in aiding in cutting jungle, I authorized him

to defer any further attempts to compel obedience in this respect until after the rains, as it is useless to remove the jungle unless it be burnt."

28. The Statement which accompanies the Magistrate's letter shows a large sum expended in his District, of which a part has been raised by subscription. Further enquiries are necessary before I can submit the accounts to Government.

29. In the Station of Kishnaghur the works recommended in Lieutenant Judge's Memorandum dated 29th February 1864, and approved of in Government order No. 1186, dated 10th March 1864, for the improvement of the Bijoy Khal have been commenced; the first or upper portion of the khal has been converted into a long tank with properly turfed sides. The Magistrate writes:—

"All that has been done in execution of Lieutenant Judge's scheme is to dig the tank above-named, to construct a raised road from the present Station Road immediately to the west of the tank along the edge of the khal as far as the south-east corner of the tank, and to clear a drain in the bed of the khal between the tank and the Station Road just mentioned. The whole expenditure incurred in this work up to the date of my Report (September 1st) was, as entered in the Statement, Rupees 2,978-3, but the works are not yet completed, and some expenditure has been made during this month."

30. The attention of the Magistrate has been called to each of the points referred to in paragraphs 12, 13, and 14 of the orders communicated with Government order No. 1479T, dated 12th July 1864.

31. The District Municipal Improvement Act has already been extended to the Suburbs of Calcutta, to Kishnaghur, Santipore, and Ranaghat, and I do not consider that it can properly be introduced into any other place as yet.

32. The Magistrate of Nuddea has given full consideration to the questions of latrines, and the burial and disposal of corpses in the more populous towns of his District, and he has ready measures which will be brought before the Municipal Committee immediately they meet.

33. As to the reservation of certain tanks for drinking purposes the Magistrate of Nuddea writes:—"It is a simple impossibility to enforce the measures which the Commissioners justly consider to be absolutely necessary for the preservation of a supply of good drinking water. All that can be done is to point out to the villagers that it is for their own benefit to enforce these Regulations by complaining against all persons who violate the Rules, and to induce them, if possible, to pay watchmen for the sole duty of preserving the tanks from pollution. As an instance, however, of the utter apathy which exists on this subject I may give the following:—A large tank has been lately dug in this town partly at the cost of the residents of the vicinity for the sole purpose of affording a good supply of drinking water. I purposely made the sides very steep with a view to keep them free from pollution, yet, within the

short time that has elapsed since the tank has been dug, the tops of the banks over which the rain runs into the tank have become so defiled with filth that the coolies employed to excavate an approach to the ghaut are unwilling to do the work. The filth must have been deposited by the persons or the servants of the persons who have voluntarily contributed Rupees 580 to obtain a supply of water which they are now doing their best to defile. There is no thoroughfare on that side of the tank, and the pollution must, therefore, have been caused by the residents of the immediate vicinity."

34. I have suggested that a hut be built on the banks of a tank which it is proposed to reserve, and this be given for occupation rent-free to some villager, the condition of his tenure being that the tank and its banks be kept clean and undefiled. This arrangement would secure the services of the whole family as watchmen, and I believe that the Zemindars would give the land and co-operate.

35. As already stated, the accounts which I have as yet received of the Epidemic indicate an improvement over last year, and I have no special reason to ask for additional medical assistance. The late measures have made the services of the Native Doctors at every Sub-Division available to the poor of the neighbourhood. The enquiries directed by Government order No. 2935T, dated 7th September, as to the number of private Medical Practitioners, are being made.

36. For the operations to be taken in hand in the season which is now at hand preparations are now being made. Lieutenant Hills is visiting the villages; he sends me a Weekly Report on the state of those which he has inspected with his recommendations for works of petty drainage, &c. As these are received I refer to the Magistrates such as seem most necessary, and request them to endeavor to raise subscriptions for the execution of the specific work on the guarantee that the Government will double the amount subscribed. As soon as I know the result I will submit it for the information of Government.

37. Besides these recommendations for petty works Lieutenant Hills is preparing a General Report on the drainage of the affected country.

38. The country is too wet at present for clearance operations; but they should recommence in November. I am anxious to see whether the people will bring into cultivation the land about their houses if it is cleared for them at the proper time.

39. But the instructions communicated to me on the appointment of Lieutenant Hills to the special duty put no money at my disposal except on condition that the villagers have subscribed as much for specific works. Time will be lost in ascertaining whether this condition can be fulfilled. I shall be glad if the Government can put a small sum, say 8,000 Rupees, at my disposal unconditionally to be devoted at once to clearances in anticipation of any sanction to Estimates.

STATEMENT shewing the Receipts and Disbursements made on account of Sanitary operations in the District of 24-Pergunnahs, prepared agreeably to the instructions conveyed by Commissioner's Memorandum No. 464 of the 20th September 1864, for the current year 1864-65.

RECEIPTS.										DISBURSEMENTS.									
SUB-DIVISIONAL OFFICERS.	Balance in hand of the last year.	Amount realized by Local Subscriptions.	Amount placed by the Magistrate at the disposal of the Officer entrusted for carrying out the operations for which sanction is necessary.	Amount paid in by the Magistrate on account of Salary and Establishment for which sanction is necessary.	Total.	Officers by whom the operations were conducted.	Expenditures made from amount placed at disposal.	Salary of Stationery, &c. Overment, &c.	Amount expended from Local Subscriptions levied.	Total amount expended.	Balance in hand on account of operations.	DETAILS OF EXPENDITURE.							
												Expenditures as classified in villages.							
	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.		Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P. Rs. As. P.							
Assistant Magistrate of Baraset	246 12 4	440 1 9	500 0 0	339 5 6	1,526 3 9	Assistant Magistrate of Baraset	500 0 0	339 6 6	582 4 3	1,421 9 9	104 9 10	Baraset	85 12 3	...	...	...	...	...	...
												Nyabatty	4 6 1 6	...	...	...	...	...	...
												Kutwally	178 7 6	...	...	...	...	...	...
												Kudumgatchee	131 9 6	...	...	...	...	...	...
												Tabbaria	278 5 6	...	...	...	...	...	...
												Salary and Establishment	339 5 6	...	...	...	...	...	...
													1,421 9 9	...	...	...	...	...	...
Cantonment Magistrate of Dum-Dum	438 15 9	50 0 0	0 0 0	0 0 0	488 15 9	Cantonment Magistrate of Dum-Dum	0 0 0	69 2 9	50 0 0	119 2 9	867 13 0	Excavating Drains and cutting Jungles from Jheel south-east of Cantonments to Salt Water Lakes between Villages of Hatgearah and Nowaparah	50 0 0	...	...	...	...	...	...
												Salary and Establishment	69 2 9	...	...	...	...	...	...
													119 2 9	...	...	...	...	...	...
Cantonment Magistrate of Barrackpore	99 8 3	0 0 0	500 0 0	0 9 3	599 15 6	Cantonment Magistrate of Barrackpore	468 3 6	131 12 1	0 0 0	599 15 6	0 0 0	Amount expended in constructing Roads and cutting Jungles in Mozerampore, &c.	468 3 5	...	...	...	...	...	...
												Salary and Establishment	131 12 1	...	...	...	...	...	...
													599 15 6	...	...	...	...	...	...
Rupees	783 2 4	490 1 9	1,000 0 0	339 14 9	2,613 2 10	Rupees	908 3 5	540 4 4	632 4 3	2,140 12 0	472 6 10								

W. L. ROBINSON,
Officiating Magistrate.

MAGISTRATE'S OFFICE;
24-PERGUNNAHS,
The 27th September 1864.

From S. C. BAYLEY, Esq., Junior Secretary to the Government of Bengal, to the Commissioner of the Nuddea Division, —(No. 5500, dated the 2nd December 1864.)

THE Lieutenant-Governor desires me to notice the following points in replying to your letter No. 219, dated the 18th ultimo, regarding the operations carried on in your Division during the last dry season for the mitigation of the Epidemic fever.

2. I am to express His Honor's satisfaction at the favorable report of the manner in which the Overseer of the Nychatty Circle in the Baraset Sub-Division, Greesh Chunder Mookerjee, performed the duties assigned to him. The management of the operations in the Dum-Dum Sub-Division also calls for the Lieutenant-Governor's approval.

3. His Honor sanctions the expenditure* incurred by the Assistant Magistrate of Baraset, and the Cantonment Magistrate of Barrackpore on account of these operations in excess of the sum† authorized to be assigned to those Officers in the orders of the 22nd February last, and the necessary instructions will be issued for the adjustment, in communication with you, of the entire amount‡ of the advances made to them during the last season. His Honor observes that, though the sums allotted to the Assistant Magistrate of Baraset and the Cantonment Magistrate have been exceeded,

the entire expenditure in the 24 Pergunnahs falls short of the amount assigned to that District.

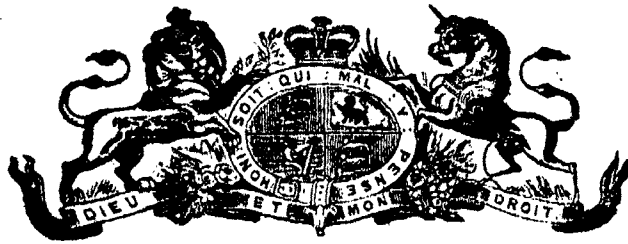
4. The Lieutenant-Governor will await a further Report from you before issuing orders for the adjustment of the advances made to the Magistrate of Nuddea.

5. The necessary orders will be issued to advance to you from the General Fund subordinate to the Amalgamated District Roads' Fund the sum of Rupees 8,000 for the purpose indicated in the concluding paragraph of your letter subject to future adjustment.

6. The question raised in your 13th and 14th paragraphs, as to whether the stench arising from the maceration of jute is prejudicial to health, has been referred for the opinion of the Principal Inspector-General, Medical Department.

From S. C. BAYLEY, Esq., Junior Secretary to the Government of Bengal, to the Officiating Principal Inspector-General, Medical Department, —(No. 5504, dated the 2nd December 1864.)

IN forwarding the accompanying extract* from a Report submitted by the Commissioner of Nuddea of the measures adopted in his Division for the mitigation and prevention of the Epidemic fever, I am desirous to request that you will favor the Lieutenant-Governor with an expression of your opinion as to whether the stench arising from the process of macerating the jute plant has necessarily any injurious effect on the health of those living within its influence.



SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, DECEMBER 28, 1864.

OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE will henceforward be published, containing such Official Papers and Information as the Government of Bengal may deem to be of interest to the Public, and such as may usefully be made known.

Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on a payment of six Rupees per annum if delivered in Calcutta, or twelve Rupees if sent by Post.

No Official Orders or Notifications, the publication of which in the GAZETTE is required by Law, or which it has been customary to publish in the GAZETTE, will be included in the SUPPLEMENT. For such Orders and Notifications the body of the GAZETTE must be looked to, as heretofore.

Measures taken with a view to substitute the Coinage of British India for the Narainy Rupees current in Cooch Behar.

From LIEUTENANT-COLONEL J. C. HARTON, Commissioner of Cooch Behar, to the Secretary to the Government of Bengal,--(No. 165, dated the 6th June 1864.)

By my letter No. 42 of 2nd April last, to your address, I reported receipt of cash and Government Securities of the Rajah of Cooch Behar, and I promised to furnish a further report as to the mode in which I proposed to dispose of the surplus cash.

2. The Government Securities left by the late Rajah, representing Rupees 6,51,300, have been lodged in the Bank of Bengal; the yearly interest on these Securities is Rupees 30,228. The estimated value of coin of sorts in the Treasury was Government Rupees 5,57,997. There are bond debts and shares in a Joint Stock Company representing about Rupees 60,000, but the debts are doubtful of recovery, and the shares are in the hands of a person against whom legal proceedings have been instituted for their recovery. The Rajah's debts are not as yet clearly ascertained, but, I think, may certainly be reckoned as not exceeding Rupees 50,000. The income of the State notoriously exceeds its expenditure, so that although the yearly surplus has not been ascertained, six lacs, in addition to the amount already invested, may, I think, be pretty safely reckoned upon as available surplus.

3. A portion of this surplus is in the local coinage of the country—Narainy Rupees. The coin is, however, in reality half Narainy Rupees, as two pieces are reckoned to one Narainy, the value of which two pieces is, according to the orders of Government of 18th April 1834, estimated at $\frac{1}{100}$ of the Farrukabad Rupee. This coinage is the current coinage of Cooch Behar and of the Ratan border. It formerly had a more extended

circulation in Assam, Mymensing, and Nepal, but from causes which I shall notice hereafter the circulation has become circumscribed.

4. If in discussing the question of the best mode of disposing of the Rajah's surplus cash I had merely to consider that course which in itself was simplest, and consequently best, the matter would be very quickly disposed of. The Narainy coinage would be sent to the Mint and the amount invested in Government Securities. But there is a larger question; should the present occasion be taken advantage of to do away with the Narainy Rupee or not? It can hardly be evaded, for if so large a sum as Rupees 5,51,000 is permanently re-coined for circulation, it must seriously affect the position of the coin on the market.

5. There is another important consideration. The coin is a legal tender in Cooch Behar, and is the one in which the tribute of the country to the British Government is payable and the rents of the Ryots are received. Is it possible, without great eventual injury to the people, to allow this coin to circulate without renewal in a continually debasing state? I hold it to be capable of mathematical proof that, if the present arrangements are continued and no improvement in the coinage takes place, the day must arrive when the Rajah will have no revenue at all.

6. The privilege of coining is almost everywhere cherished, and has been most earnestly sought to be maintained by the Rajahs of Cooch Behar. From what I know of the feelings of the Rajah's family—tribe I would say—and of the people, I am compelled to believe that the abolition of the Narainy Rupee would be regarded as an annihilation of the Rajah's separate jurisdiction and be regarded with very bitter feelings by the former. I do not think it would be regarded with favor by any party whatever, though it seems to me probable that the measure would on the whole be beneficial to all, if freely acquiesced in.

7. The copies of correspondence* annexed shew that the Government have from an early period checked, and at last altogether prohibited, the coinage of Narainy Rupées. In the first instance, apparently, because base coin got into circulation with ease, and latterly, in addition to other reasons, because the Rajah was not in favor; but the Rajahs have steadily claimed the privilege as their right, and the denial of it seems to me quite inconsistent with such expressions as the following, taken from the letter of the Secretary to Government of 25th September 1819, just two years previous to the last refusal of permission to coin:—"The sovereignty of the Rajah has been so repeatedly and continually recognized by various decisive acts of Government during a long period, that the Governor General in Council does not think it expedient to renew the discussion of the question argued in the remaining part of your despatch."

8. A letter of the Rajah Hurrendernarain, dated 1814, complains that since the restriction of his Mint he had only coined Rupees 12,000 yearly to be given away as presents at the Hoollee, and that the Commissioner had wantonly interfered with this privilege. In a previous letter of 1795 he complains that the coinage was then worn out, and great inconvenience felt from stoppage of the Mint. I cannot find that coinage was ever sanctioned by Government since 1805; but on the occasion of the accession of the two last Rajahs Rupees 1,000 and a certain sum in Gold Mohurs were coined in the name of the new Rajah with the sanction of the Governor General's Agent, which fact having been proved to my satisfaction, I sanctioned, as Governor General's Agent, the striking of a similar amount on the accession of the present Rajah.

9. There is a current belief that a good deal of the coin in existence has been coined in Bootan, and that the coin continues to be struck in that country. Nearly all now in circulation bears the name of Hurrendernarain on one side, and a Bootan inscription, which no one can read, upon the other; some say it is the name of the Deb Rajah, and that the Bootans claim the coin to be theirs. It is of very variable standard, and I fear when melted down would not turn out at all what it should be. The quantity in circulation in Cooch Behar and the borders of Bootan has been estimated at from fifteen to thirty lacs. Ten lacs is, in my opinion, the lowest amount. This would leave a sum in and out of the Treasury of from fifteen to thirty-five lacs to be dealt with.

10. Had the tribute been uniformly paid in Narainy Rupees, the bulk of the coinage must ere this have disappeared from Cooch Behar. Endeavor was once made to induce the Rajah to pay in the Government coin at a fair rate of exchange; this, however, he refused to do; nevertheless at some subsequent date it was discovered that in the exchange between Company's and Narainy Rupees the discount on the latter was less in Cooch Behar Bazar than that charged by Government; the Rajahs, therefore, for many years have been in the habit of purchasing Company's Rupees and remitting them to the Government Treasury at Gawalparah, whereby the Rajahs gained from two to three per cent., but in order to maintain their right to pay in Narainies a small sum in that coinage was always sent with each remittance.

11. It has been in the power of the Rajah to largely influence the market value of his coinage. By insisting upon his Ryots paying their revenue in that coin it would rise in value, or by purchasing largely the Company's Rupee it would fall. It is a fact that it has once been at a discount of fifty per cent., as compared with its par value, in consequence of the Rajah buying the Government coin and flooding the market with Narainies.

12. It is hardly possible but that the existence of a coin which is not current beyond the border to the south should be other than a hindrance to the traffic of the Ryots, and did it not appear that the removal of this objection on the south would create a like difficulty on the northern border, there would be strong grounds for recommending the abolition of the coin.

13. On the whole it appears to me, for several reasons, undesirable at present to abolish the Narainy coinage, for—

1st.—The measure would give offence to all the Rajah's connexions;

2nd.—The abolition would render requisite an entire change in the revenue settlements;

3rd.—It would greatly hinder money transactions with the tribes living within the Bootan border. Therefore, instead of abolishing the coinage, I would respectfully propose to improve and restore it.

14. I would propose gradually to call in the old coins and to remit them to the Mint for re-coinage in silver of the same standard as the Government coin, and of the exact value that the present coin should be, viz. 100 Narainy equal to 68 Government Rupees, half Rupees, as at present, only to be issued. I would propose that the coin should bear on one side the name of the Rajah and date, and on the other, in lieu of the Bootan inscription, either the Queen's Head, or an inscription in Bengallee denoting the Rajah's dependance on Her Majesty.

15. The terms of Act XVII. of 1835, which are unaffected by Act XIII. of 1862, would appear to prohibit the striking of this special coinage at the Mint, but the difficulty may be removed by legal enactment, or recourse can be had to other means of coinage.

16. It has been a matter of consideration whether the coin I propose to issue would have the protection of the Law in India or not. It appears to me that such coin would be sufficiently protected under the provisions of the Section of the Penal Code which relates to coin.

17. The surplus coin now in the Treasury would, if this proposition be sanctioned, be made use of for a time to improve the circulating medium. This purpose having been served it may be invested in Government Securities. It is hardly possible that the current coin can continue to circulate without the certainty of a day of confusion and distress eventually arriving; there are signs of it already, and I would gladly avert the threatened evil by timely measures.

18. I believe that the measure I propose is not without a precedent, but that some similar one has been sanctioned with reference to the Princes of Central India. With these remarks I beg to submit the question for the consideration of the Hon'ble the Lieutenant-Governor of Bengal.

To H. S. D. TUCKER, Esq., Sub-Secretary, Revenue Department, Fort William.

I HAVE the honor to reply to your letter of the 2nd December last, addressed to my predecessor, wherein he was directed to state whether any objection occurred to the introduction of the same general currency which prevails in the other Provinces into the District of Cooch Behar, and whether it might not be advisable to receive the 19 Sun Sicca in all revenue payments at the established rate of exchange between that Currency and the Narainy Rupees.

2. In the first instance I think it necessary to represent to you, for the information of the Hon'ble Board, that although the currency of the Narainies has been established for near 300 years past throughout Behar and the extensive countries of Bootan, Thibet, and some neighbouring hill nations almost exclusively, and partially in Assam and Nepaul, yet it has never been received or passed as coin in any of the Company's Districts, nor is it likely under the circumstances which at present and for many years back seem to have governed the commercial intercourse which subsists between Bengal and the nations alluded to.

3. The Narainy Rupees which are sent to Rungpore and purchased by the bankers at that place are again disposed of by them to the Bengal Merchants, who have call for the productions either of Cooch Behar or any of the abovementioned countries where Narainy always pass equal to Sicca Rupees, and are in many instances taken even in preference. They can, therefore, never interfere with the 19 Sun Currency in any of the Company's Districts.

4. That the commerce of these countries has chiefly derived its support from the advantage derived to the Bengal Merchants' gain on difference of battas appears pretty evident from the great decrease it has experienced since the Government has been accustomed to sell at a dearer rate than formerly the amount they receive on account of the Rajah's tribute, which forms so considerable a proportion of the coin in circulation in the District of Cooch Behar.

5. Hence it should appear that the introduction of the Sicca Currency to the exclusion of the Narainy would evidently prove highly injurious to the commerce at present subsisting if not tend ultimately to its total suspension.

6. This, however, forms not the only objection; a considerable one is included in the difficulty which must attend any attempt to change a Currency so long and extensively established among nations who are altogether removed from the authority of Government's Regulations, and who are known to be extremely tenacious of old customs. Should the Hon'ble Board determine on calling in and re-coining all the Narainy specie within their reach, it will be impossible to prevent the Bootas, Assamees, and other nations from continuing the coinage; and if, as I am credibly informed, they at present do it to some extent in consequence of the present cessation of the Behar Mint, they will doubtless do it to a much greater when these Rupees become more scarce.

7. Should Government, however, determine on the introduction of the 19 Sun Sicca in Behar, I know of no mode by which it could be effected except by calling in and re-coining the whole of the Narainies now in circulation.

8. It remains in this case for me to point out the attendant loss which must inevitably fall on Government, for when the amount is considered even at its lowest valuation, it will be evident that it can never be defrayed by the Cultivators, Merchants, or other immediate holders of the Narainy Rupees.

9. As data for this calculation it is necessary to premise that the whole amount of the annual revenue of the Rajah's independent Territories, which is paid in this coin, is about 2,50,000 Narainies; and although, from causes already pointed out in Mr. Smith's letter of the 7th September 1796, it is impossible to ascertain the real number circulating in this and other Districts, I conceive it but reasonable to suppose a circulation of four times the amount absolutely necessary for the payment of the revenues. The present amount in circulation may, therefore, be estimated at ten lacs.

10. The established rate at which the Rajah's tribute is paid to Government is 137 Narainy for 100 Siccas, and the rate at which they have of late years been disposed of by Mr. Smith to the Merchants is from 115 to 119 for 100 Sicca, the difference constituting a profit which Government derive from the tribute passing through their hands.

11. But that the rate at which the Rajah pays to Government by no means represent intrinsic value of the Narainy in proportion to the Sicca Rupees is very certain, as it appears, from a letter addressed to the Board of Revenue by Mr. Sub-Secretary Shakespear, under date the 6th March 1795, that by an assay made at Dacca of some Narainy Rupees transmitted to that Mint in 1793 100 Narainies turned out no more than 63-11-9 Siccas, and I have reason to believe that these Rupees were of the best kind in circulation, or they would not have been received at the Benar Treasury.

12. According to this calculation therefore it follows:—

	Sicca Rs.
That ten lacs of Narainies which are received at 137 per 100 or as ...	7,29,900
On being re-coined would yield no more than ...	6,37,343
Constituting a loss on re-coinage of ...	92,557

Were the loss to be estimated on the present mode in which the Narainies are disposed of to the Merchants, namely at an average 117 Narainies per 100 Sicca, the ten lacs would produce ...	8,54,700
Deduct as above the value of ten lacs when re-coined, viz. ...	6,37,340

The difference or loss by coinage would amount to no less than ... 2,16,360 exclusive of the expenses of re-coinage, other charges, and risk which would attend the exportation of so large a sum to such a distance as any of the established Mints.

13. I have already given my reason for believing that the Narainies sent to the Dacca Mint were of the best kind, and it is necessary to call the attention of the Governor General in Council to this circumstance, and to observe that these calculations have been made on a supposition that the ten lacs in circulation are of equal value. For if a reference be made to the

Tassildar's account in order to ascertain the proportion of Narainies received at the Treasury to the numbers refused as below standard on account of deficiency in weight and other circumstances, the latter kind will be found to amount to about one-third; and as it is impossible to ascertain how far such rejected Rupees may be under standard, it is consequently out of my power to form any probable estimate of the losses which might in reality attend the re-coining of such a sum as ten laes.

14. From this view of the subject, though I am at loss what measures to recommend, yet, under the present circumstances and state of the Narainy coinage as pointed out particularly in Mr. Smith's letter of the 7th September 1796, the observations contained in which agree perfectly with every information I have myself been able to acquire, I hesitate not to express my sentiment of the necessity which there appears of either adopting such a mode of introducing the Sicca coinage into this District as will least distress the cultivators and obstruct its commerce at large, or of permitting a re-coining of the Narainy Rupees upon some regular and permanent plan.

NOTE.—The copy of this letter is on paper bearing watermark of 1796; it is without date or signature, but it is probably of 1797-98, from Mr. R. Ahmuty, Commissioner of Cooch Behar.

B.

From D. SCOTT, Esq., Commissioner of Cooch Behar, to H. T. PRINSEP, Esq., Persian Secretary to Government, Fort William, —(dated the 29th September 1821.)

I HAVE the honor to transmit to the Most Noble the Governor General in Council a letter to His Lordship's address from the Rajah of Cooch Behar, soliciting permission to re-establish his Mint for the coinage of Narainy Rupees.

2. From a reference made when I was last in Calcutta to the records in the Office, Territorial Secretary, the following appear to be the circumstances connected with the Rajah's claim to the right of coinage:—

3. When Mr. Purling concluded the Treaty of 1772 with the Nazir Deo, of Cooch Behar, the right of coinage was not acknowledged in that document; but, in consequence of the earnest request of the Nazir Deo, submitted to Government by Mr. Purling at the time, it was subsequently sanctioned without any limitation in regard to the amount to be coined.

4. The Rungpore Treasury being soon afterwards inundated with Narainy Rupees, which could not be disposed of on the succession of Dujinder Naryn, the present Rajah's father, to the Zemindary, as it was then called, the amount to be coined in future was limited to Rupees 12,000 annually, and a Mochulka was taken by the Dynajpore Council to that effect from the Rajah and the Nazir Deo and Dowan Deo, who were at that time considered as joint partners in the Estate.

5. Between the years 1776 and 1787, when Commissioners were appointed to enquire into the disturbances created by the Nazir Deo, the official knowledge of the existence of this agreement appears to have been lost, and since the latter year the Rajah has been considered as a tributary prince independent as far as relates to the internal management of his country.

6. The coinage of Narainy Rupees continued at intervals under several of the Commissioners appointed during the Rajah's minority until the

year 1800, when it was discontinued by order of Government apparently as a temporary measure; but on an application being subsequently made for the re-establishment of the Mint the Rajah was informed, in Mr. Secretary Dowdeswell's letter to the Commissioner of Cooch Behar, of date the 15th August 1805, that it was expected that he would not urge that request.

7. It will rest with His Lordship in Council to determine upon the propriety of acceding to the Rajah's desire, but as the coinage was discontinued upon the grounds of the public inconvenience accruing from it, I beg to state that I am of opinion that, if the coinage were in future confined to the sum agreed upon in 1776—Rupees 12,000 per annum—no inconvenience whatever could result from the re-establishment of the Mint; and that, on the contrary, if the tribute should continue to be paid in Narainy Rupees, it seems necessary that some means should be sanctioned for the occasional issue of a fresh supply of that coin which is at present, as represented in the Rajah's letter, considerably worn and a large proportion of the monies offered in payment of the tribute is necessarily rejected on that account.

8. According to the agreement entered into by the Rajah's father with the Dynajpore Council, Government is fully authorized to adopt such measures as may be found necessary to prevent any issue of coin beyond what is therein mentioned, and for this purpose it would perhaps be expedient that the Mint should only be opened after intervals of a certain number of years.

9. I beg to observe that attempts have been repeatedly made to prevail with the Rajah to agree to pay the tribute in Sicca instead of Narainy Rupees, and a considerable pecuniary sacrifice offered on the part of Government to induce him to comply, but without success; and from a recent communication on the same subject I entertain no expectation of his ever assenting to such an arrangement, the right of paying the tribute in their own coinage having always been a point upon which, above all others, the family prided themselves.

C.

From H. T. PRINSEP, Esq., Persian Secretary to Government, Fort William, to D. SCOTT, Esq., Commissioner of Cooch Behar, —(dated the 22nd October 1821.)

I AM directed by His Excellency the Most Noble the Governor General in Council to acknowledge the receipt of your letter dated 29th ultimo, forwarding a letter from the Rajah of Cooch Behar, soliciting permission to re-establish the coinage of Narainy Rupees within the Cooch Behar Territory.

2. His Lordship in Council is of opinion that to allow this coinage to be received after it has been for twenty-one years prohibited will be opening the door to abuses not easily controlled besides being, on other accounts, objectionable. Since, therefore, the Rajah cannot claim it as a matter of right, and is not entitled by his late conduct to any favor or indulgence, His Lordship in Council has no hesitation in meeting the request with a decided negative. Enclosed is a reply to the Rajah's letter to that effect. A copy in English and Persian accompanies for your information.

3. The difficulty experienced by the Rajah in providing Narainy Rupees for the tribute due from

him is, in the judgment of His Lordship in Council, rather an argument against than in favor of the concession, for the Rajah knows that it is open for him at any time to negotiate a conversion to Calcutta Siccas on very favorable terms, and that it is an object with the British Government to promote such an arrangement.

From the Hon'ble A. EDEN, Secretary to the Government of Bengal, to the Deputy Auditor and Accountant-General, Bengal,—(No. 2002T., dated Darjeeling, the 2nd August 1864.)

I AM directed by the Lieutenant-Governor to forward herewith, for report, a copy of a letter, No. 185, dated the 6th June last, with enclosures, from the Commissioner of Cooch Behar, on the subject of the financial affairs and the coinage of that State.

2. I am to say that after the decided refusal given by the Governor General in Council in 1821 to the Rajah's request for permission to re-establish the coinage of Narainy Rupees (which had then been abolished for twenty-one years) it is quite out of the question to think of restoring the privilege, and that it would be still more objectionable to strike, as Colonel Haughton proposes, a new coin of the same standard as the English Rupee, but only $\frac{1}{100}$ of its value and with a different device.

3. I am also to ask your advice as to the best mode of proceeding with a view to calling in the Narainy Rupees now current in Cooch Behar, which are said to be in a debased condition, and of substituting the coinage of British India in their place.

From the Hon'ble A. EDEN, Secretary to the Government of Bengal, to the Commissioner of Cooch Behar,—(No. 2003T., dated Darjeeling, the 2nd August 1864.)

I AM directed to acknowledge the receipt of your letter No. 185, dated the 6th June last, with enclosure, reporting on the financial condition and the coinage of Cooch Behar, and to forward, for your information, a copy of the orders* this day issued on the subject to the Deputy Auditor and Accountant-General, Bengal.

2. I am at the same time to say that the Narainy Rupees now in the Cooch Behar Treasury should be sent to the Mint for re-coinage into British Rupees, and the Cooch Behar State credited with the amount of their value according to the outturn.

From the Hon'ble A. EDEN, Secretary to the Government of Bengal, to the Secretary to the Government of India, Foreign Department,—(No. 2004T., dated Darjeeling, the 2nd August 1864.)

I AM directed by the Lieutenant-Governor to submit, for the information of His Excellency the Governor General in Council, a copy of a letter, No. 185, dated the 6th June last, with enclosure, from the Commissioner of Cooch Behar, reporting on the financial condition and the coinage of that

State, together with a copy of the orders* issued by His Honor on the subject to the Deputy Auditor and Accountant-General, Bengal, and to Colonel Haughton.

From COLONEL H. M. DURAND, C. B., Secretary to the Government of India, Foreign Department, to the Secretary to the Government of Bengal,—(No. 309, dated Simla, the 10th September 1864.)

IN reply to your letter No. 2004T., dated 2nd August, and its enclosures, forwarding correspondence with the Commissioner of Cooch Behar regarding the financial condition and the coinage of the State, I am directed by the Governor General in Council to intimate that the proceedings of His Honor the Lieutenant-Governor respecting the coinage are judicious and are approved. His Excellency in Council thinks it expedient to remark that it will be necessary to send back to the Cooch Behar Treasury in British Rupees such portion of the Narainy Rupees now in hand as may be wanted for circulation and to invest the rest.

From J. L. LUSHINGTON, Esq., Deputy Auditor and Accountant General, Bengal, to the Secretary to the Government of Bengal,—(No. 344-1, dated the 20th September 1864.)

I HAVE the honor to acknowledge the receipt of your letter No. 2002T., dated 2nd ultimo, calling for a report on the letter of the Commissioner of Cooch Behar, dated 6th June last.

The question of the currency of a quasi-independent state is beset with more than ordinary difficulties, as there may be political reasons for dealing with the subject in a different manner from the usual course. I also have some hesitation in giving an opinion on the subject, as the question appears to me to belong more properly to the Government of India.

In obedience, however, to the orders of His Honor the Lieutenant-Governor, I beg to annex my views on the subject.

In the 2nd paragraph of the Commissioner's letter it is stated that there is an available surplus of 6 lakhs of Rupees in cash, a portion of which is said, in the next paragraph, to be in local coinage—Narainy Rupees.

It is not, however, stated how much of this sum is in local coinage; neither is it anywhere stated how much of this local coinage is in circulation. In the 9th paragraph allusion is made to another description of Narainy Rupee, supposed to have been coined in Bootan, of which there is supposed to be from 15 to 30 lakhs in circulation. I presume, however, it is not intended to interfere with these, but only with the Cooch Behar coinage.

So far, then, as can be gathered from the report of the Commissioner, the value of Cooch Behar Narainy Rupees in circulation is less than 6 lakhs; and as Government has determined that the Rajah shall not coin any more, it will not be a difficult matter to substitute Government Rupees for Cooch Behar Narainy. And as the Narainy Rupee of Cooch Behar was only equal to $\frac{1}{100}$ of the Government Rupee, it would be as well, for the convenience of the public, largely to introduce coins of the value of $\frac{1}{2}$, $\frac{1}{4}$, and $\frac{1}{8}$ of a Rupee.

Further, to prevent inconvenience, the Cooch Behar Rupee might be gradually withdrawn, and this might be done by Government insisting on a certain portion of the tribute being paid in local coinage. It may safely be left to the usual laws of demand and supply to prevent any inconvenience being felt by the gradual absorption of the local coin.

If it be considered desirable to discourage the use of any but Government Rupees, this might be

done by declaring the Government Rupee to be the only legal tender after a certain date.

I cannot concur in the opinion expressed by the Commissioner in the 5th paragraph; and the fears which he entertains are at least premature, for he states in the 10th paragraph that, so far from the coins having deteriorated in value, the Rajah makes a profit by purchasing and paying his tribute in Government Rupees. But all fear on this account will be dispelled by substituting Government Rupees for the Narainy.

The objections of the Commissioner to the abolition of the Narainy Rupee are summed up in the 13th paragraph.

The validity of the first objection, probably, will best be judged by the Political Department; but it loses much of its force, as the Government has determined not to allow the Rajah to coin, and the present amount in circulation is inadequate. As regards the second objection, as the present amount of coin in circulation is inadequate some other must take its place, it is not likely that Government will coin Rupees of different values; the change in the revenue settlement, therefore, becomes, to a certain extent, a necessity.

As regards the third objection, it is difficult to perceive how the substitution of a good coin containing a certain amount of silver is likely to interfere with the transactions of the tribes living within the Bootan border.

I am entirely opposed to the proposition contained in the 14th paragraph, and think it is highly improbable that Government will issue such a coin. By the introduction, or rather substitution of the Government coin for the Narainy Rupee, no legislative enactments will be necessary.

From S. C. BAYLEY, Esq., Junior Secretary to the Government of Bengal, to the Commissioner of Cooch Behar, — (No. 4519, dated the 26th October 1864.)

I AM directed to forward to you, herewith, a * No. 344-1, dated 20th September last. copy of a Report* by the Deputy Auditor and Accountant-General, Bengal, on the subject of your letter No. 165, dated the 6th June last, and to convey to you the orders of the Lieutenant-Governor in regard to the best mode of calling in the Narainy Rupees now current in Cooch Behar and of substituting the coinage of British India in their place.

2. The measures which His Honor would adopt are (1) absolutely to prohibit local coinage as has been ordered already; (2) to make the Government Rupee and its legal fractions a legal tender at the fixed rate of 68 Government Rupees for 100 Narainy Rupees; (3) to remit all Narainy coins received at the Treasury to the Mint in Calcutta to be re coined into Government Rupees; (4) to issue from the Cooch Behar Treasury nothing but Government Rupees and their legal fractions; (5) to receive for the present indifferently both Government Rupees and Narainy Rupees of standard value in payment of State dues, but to declare that after a certain date (say the 1st of January 1866) Narainy Rupees shall cease to be a legal tender and shall be received only as bullion; (6) to receive debased and foreign coin at once only as bullion; (7) to keep the public accounts in Government Rupees from the

commencement of the next year of accounts; and (8) to make the new settlement in Government Rupees.

3. His Honor requests that you will be so good as to report whether these measures cannot be carried out at once, and also that you will prepare and send up a draft of the Proclamation which you would propose to issue for that purpose.

From J. T. WHEELER, Esq., Assistant Secretary to the Government of India, Foreign Department, to the Junior Secretary to the Government of Bengal, — (No. 271, dated the 21st November 1864.)

WITH reference to your docket dated 20th ultimo, No. 4511, I am directed to state that the Governor General in Council approves of the orders issued by the Lieutenant-Governor to the Commissioner of Cooch Behar regarding the introduction of the coinage of British India into that Province.

Results of the Trials made with Hay's Glue Mixture for stopping Leakages in Roofs of Buildings.

REPORT on the trials made during the rains of 1864 in stopping terrace roof leaks with waterproof glue mixture, in obedience to instructions from the Executive Engineer, Presidency Division, — (dated 11th November 1864.)

THE first trial was made between the 15th and 18th July last. On this occasion I selected in the Dock Yard a sloped roof composed of 2 tiles, 1 foot square and 1 inch thick, set in lime cement and with mortar between their joints. The roof was leaking very considerably all over, hardly a square foot within was free from leakage. I had the mortar from between the horizontal and vertical joints of the upper bricks carefully removed, the mixture was then poured in while in a liquid state, and with a trowel (frequently oiled) pressed in the liquid, removing the superfluous quantity lower down into the joints of the bricks, where it soon hardened.

The area of the roof is 22×22 , or 484 superficial feet; but the actual surface covered by the mixture is only about 37 superficial feet, averaging in depth between $\frac{1}{2}$ and $\frac{1}{4}$ of an inch. The actual length of the joints filled in is $22 \times 22 = 484 + 21 \times 20 = 420$, or 900 running feet, about $\frac{1}{2}$ to $\frac{3}{4}$ an inch thick and about $\frac{1}{2}$ an inch broad.

The second trial was made on a flat terraced roof in the Dock Yard with the remainder of the glue mixture. I filled in 100 running feet of roof cracks in places where the roof leaked, first removing loose mortar, widening the cracks to about 1 inch wide and as deep also, both sides meeting to a point along the vertical centre of each crack, treating the mixture as in the previous experiments.

I have carefully watched the result, from time to time examining the roofs above and the rooms below, and inquiring if any leaks occurred since then. I was told that there was no leakage at all; and on two occasions I was in the room during heavy falls of rain, and was satisfied that there was no leakage at all.

The first trial cost as follows :—

	Rs.	As.	P.	Rs.	As.	P.
Labour.—6 Masons, at 5 annas each...	1	14	0			
3 Beldars, at 3 „ „ ...	0	9	0			
3 Boys at 2 „ „ ...	0	6	0			
Materials.—Pots and pans ...	0	1	6			
Oil ...	0	2	6			
Firewood ...	0	1	0			
45 seers patent glue } mixture, at Rs. 7-14 } per maund ...	8	13	9			
				1	1	5
				0		

The second trial cost as follows :—

	Rs.	As.	P.	Rs.	As.	P.
Labour.—2 Masons, at 5 annas each...	0	10	0			
1 Beldar, at 3 „ „ ...	0	3	0			
1 Boy at 2 „ „ ...	0	2	0			
Materials.—Pots and pans ...	0	0	3			
Oil ...	0	0	6			
wood ...	0	0	3			
15 seers patent glue } mixture, at Rs. 7-14 } per maund ...	2	15	3			
				3	15	3

Averaging per 100 superficial feet of flat tile sloped roof ...	2	6	0
Averaging per 100 superficial feet of surface covered with glue, $\frac{1}{4}$ to $\frac{1}{2}$ inch thick ...	32	7	0
Averaging per 100 running feet of tile joints filled ...	1	5	4
Averaging per 100 running feet of terrace flat roofs ...	3	15	3

I beg also to report that the trial made last year on the roof of the Judge's Court House, Pergunnahs, has stood fairly; the rooms have not leaked since, though the rains have been unusually heavy this year. I have, however, remarked that, though when I filled the cracks last year, I did not leave the mixture with a convex form, but more of a flat surface, it has now assumed a convex form, swelling above the mortar

surface, and has become more hard and less yielding than it was shortly after being poured into the cracks last year.

I am of opinion that upon terraced roofs liable to be trodden upon frequently the mixture will not answer so well; it softens under pressure, and, adhering to the shoes of persons walking over it, will be drawn out from the cracks altogether. For flat roofs not so exposed it will, I think, answer remarkably well, as the work can be carried on under heavy rain so long as the glue pot on the fire is not exposed to the rain. It will, however, be more expensive than the ordinary method of stopping roof leaks. Its use might be limited to flat roofs of record-rooms, hospitals, churches, and dwelling-houses, &c.

(Sd.) F. W. MANN,
1st Class Sub-Engineer, P. W. D.

Memorandum from LIEUTENANT-COLONEL J. P. BRADLE, R. E., Chief Engineer of Bengal, to the Superintending Engineer, Presidency Circle,—(No. 1827, dated 16th December 1864.)

THE undersigned has the honor to acknowledge the receipt of memorandum from the Superintending Engineer of the Presidency Circle No. 3528, dated the 29th ultimo, and to state that the Report by Sub-Engineer F. W. Mann, therewith received, regarding further trials of Hay's patent glue mixture in stopping leakages in roofs, is considered satisfactory. This Report will be forwarded to Government in view to its publication in the *Calcutta Gazette*, and it will also be circulated to the Department.

2. The undersigned would wish that the Garrison Engineer of Fort William should make experimental use of the patent glue, watching and reporting the results.